

Delaware and Hudson Canal Company Working Horses and Mules on the Gravity Railroad



Mules for the Coal Mines. Post card in the collection of the Carbondale Historical Society and Museum and the Carbondale D&H Transportation Museum

By

S. Robert Powell, Ph.D.

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A History of the
Delaware and Hudson Canal Company
in 24 Volumes

S. Robert Powell, Ph.D., 1974
Indiana University, Bloomington, IN

I	Gravity Railroad: 1829 Configuration
II	Gravity Railroad: 1845 Configuration
III	Gravity Railroad: 1859 Configuration
IV	Gravity Railroad: 1868 Configuration
V	Gravity Railroad: 1899 Configuration
VI	Waterpower on the Gravity Railroad
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IX	Farview Park
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XXIV	The Birth and First Maturity of Industrial America

Acknowledgements

The Delaware and Hudson Canal Company could not have mined or marketed anthracite coal in the nineteenth century without the help of thousands of horses and mules. The physical welfare of these silent partners in this immense commercial enterprise, both on and off the job, was the responsibility of thousands of men and boys.

There were, doubtless, some men and boys who worked with these animals who mistreated them, and we can only hope that those vicious and violent, semi-conscious humanoids will spend eternity somewhere nice and cozy, like the outer ring of the Seventh Circle of Dante's *Inferno*, there immersed in Phlegethon, a river of boiling blood and fire, to a level commensurate with their sins.

The vast majority of the men and boys who cared for and/or worked with these animals on the Delaware and Hudson Canal Company's Gravity Railroad and on the Delaware and Hudson Canal and in the anthracite mines operated by the D&H and independent operators surely knew that in order to maximize the amount of work that these working animals could perform that not only did those animals have to be appropriately housed and fed and watered but also treated humanely and worked intelligently.

In *Growing Up in Coal Country*, Susan Campbell Bartoletti, notes (p. 43): "For most of the boys, the mules became pets, and the boys took good care of them. They cleaned the mule stables daily, sprinkled lime over the straw several times a week, filled the feed boxes, and made sure the trough held fresh water. Each morning they currycombed their mules and checked the fit of the harness so they wouldn't cause shoulder galls, or sores, as the mules pulled the heavy mine cars. / In addition to the oats, corn, alfalfa, cake meal, and salt that the mules were fed, the boys brought apples, carrots, and other goodies to work, and even asked their mothers to pack extra sandwiches."

To the thousands of men and boys who cared for and/or worked with the working horses and mules on the Delaware and Hudson Canal Company's Gravity Railroad and on the Delaware and Hudson Canal and in the anthracite mines operated by the D&H and independent operators, we not only dedicate this volume in this series on the history of the Delaware and Hudson Canal Company, but also are pleased to here express our thanks to them for their humane and intelligent care and treatment of these working horses and mules.

Carbondale, PA
October 9, 2015

Overview

The industrial revolution in America was born on October 9, 1829, in Carbondale, PA, when the first cut of Delaware & Hudson Gravity Railroad coal cars, loaded with mass produced anthracite coal, headed up Plane No. 1 out of Carbondale for Honesdale and to market in New York City.

Those cars, filled with anthracite coal from mines in Carbondale, traveled over 16 miles of railroad tracks, made up of eight inclined planes and three levels, to Honesdale, where the coal was transferred into canal boats and hauled 108 miles, through the D&H Canal, to the Hudson River.

Most of the coal that was sent through the D&H system in the course of the nineteenth century was shipped south on the Hudson River to the New York metropolitan market and to many ports on the Atlantic seaboard, north and south of New York. A large quantity of anthracite coal was also shipped up the Hudson River to Albany, and shipped through the Erie Canal to the American Midwest.

The mining, manufacturing, and transportation system that became operational on that day between the anthracite mines of the Lackawanna Valley and the retail markets for that coal on the eastern seaboard and in the American Midwest was the product of enlightened entrepreneurial, technological, and managerial thought on the part of the officers, managers, directors, and employees of the Delaware and Hudson Canal Company. That system, the first private sector million-dollar enterprise in American history, was, at the same time, the pioneer expression on this continent of mass production, a mode of production that would thereafter characterize industry in America and around the world.

Mass production, the revolutionary engine that made it possible for the D&H to launch its mining, manufacturing, and transportation system in Carbondale on October 9, 1829, and to perpetuate that system well into the 20th century, came into existence when it did and lasted for as long as it did because a body of employees

and managers, within the context of a community, of which both groups were a part, chose to work together for their mutual benefit and enrichment, to mass produce and market a commodity, and in so doing to implement the clearly articulated production and marketing objectives of “the company,” the Delaware and Hudson Canal Company.

In this 24-volume work on the D&H,* we will (1) document the history of that mining, manufacturing, and transportation system, with a special focus on the rail lines of the Delaware and Hudson Canal Company in northeastern Pennsylvania, from the opening of the D&H Gravity Railroad in 1829 to the anthracite coal strike of 1902; and (2) demonstrate that the history of that mining, manufacturing, and transportation system, the D. & H. C. Co., from 1829 to 1902, is, at the same time, not only an illustration of eight decades of fine tuning by the D&H of their mass production procedures and techniques but also a full-bodied expression and record, both from the point of view of the D&H and from the point of view of its employees, of the birth, development, and first maturity of the industrial revolution in America.

This is a success story, directed by America’s pioneer urban capitalists, and implemented by them and the tens of thousands of men, women, and children who emigrated from Europe to the coal fields of northeastern Pennsylvania in the nineteenth century to work for and with the D&H and to start their lives over again. This is a success story that is important not only within in the context of local, state, and regional history but also within the context of American history. It is a compelling story.

*The present volume focuses on working horses and mules on the Gravity Railroad. Each of these 24 volumes will focus on one aspect of the history of the Delaware and Hudson railroad, from the opening of the Gravity Railroad in 1829 to the anthracite coal strike of 1902. Each volume will be an autonomous entity and published separately.

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Working animals in the nineteenth century

Animals have been working for and with man since prehistoric times, and it is not an overstatement to affirm that they have had—and continue to have—a significant impact on the history of man.



American history is filled with animals as central figures at epoch-defining moments. Think about Paul Revere and William Dawes and Samuel Prescott (and others whose names have not come down to us) and their celebrated midnight rides, on horseback, on the night of April 18, 1775, to warn the American patriots that the British were headed their way.

Think about the Spanish-American War and about Teddy Roosevelt and the 1,060 Rough Riders and 1,258 of their horses and mules that made their way on May 29, 1898 to the Southern Pacific railroad to travel to Tampa, Florida, where they were to set off for Cuba.

Think about Colonel Theodore Roosevelt, on horseback, leading his men in battle up San Juan Hill.

American history would surely have to be re-written if horses and mules had not been key players during those moments—among many thousands of others—in the history of this nation.

Closer to home, here in the Lackawanna and Wyoming valleys of Pennsylvania, the Delaware and Hudson Canal Company could not have mined or marketed anthracite coal in the nineteenth century without the help of horses and mules. The role played by those D&H horses and mules is the subject of this volume.

The D&H office building on North Main Street

Working horses in Carbondale are shown here drinking from the fountain that once stood at the intersection of North Main Street and Lincoln Avenue.



City Drinking Fountain, Carbondale, Pa. Post card in the collection of the Carbondale Historical Society and Museum. This fountain was moved out of the intersection of Lincoln Avenue and Main Street when a house was being moved up Main Street. The fountain, it is said, is now at Camp Ely, a Girl Scout camp in Brooklyn, PA.

Another drinking fountain for horses and mules was located in Carbondale directly across from Carbondale City Hall, at the Main Street side of Memorial Park. That fountain is shown in the post card shown below. This post card was sent on September 18, 1905 by "John" to "Miss Edna Loomis, Shehawken, / Wayne Co., / Penna."



Drinking fountain for horses and mules

"A 4011 City Hall Park, Carbondale, Pa. Copyright 1904 by the Rotograph Co." Post card in the collection of the James and Margaret Russell Homestead, Fell Township, PA.

7002

Mules and Horses

Both have their virtues.

Mules can carry more weight, compared to horses of the same weight. They also can pull more. Rarely, if ever, does one see horses and mules compete together in pulling events.

Mules don't tire as quickly as horses, even with weight. A mule, unlike a horse, will usually pace himself, so to speak, and never exert more energy than needed. You can make demands on a horse, but not on a mule. In *Growing Up in Coal Country* by Susan Campbell Bartoletti, we read (p. 45): "The mules [in the mines] knew how many cars they were supposed to pull, and if a driver sneaked on another car, the mules wouldn't budge until the car was removed. The mules also knew instinctively when it was quitting time, even though no whistle could be heard in the mines. At quitting time, the mules simply halted wherever they happened to be. No amount of coaxing or bullying seemed to budge a mule that had made up its mind."

Mules, with training, can "coon jump." Horses can't. A "coon jump" is essentially a standing high jump. Mules can do this because they are a cross between a female horse and a male donkey. It's their donkey blood that gives mules the unique muscular characteristics that enable them to do a standing high jump. Competitions are held to see which mule can jump the highest from a standing start. Horses can jump higher than mules but they can not coon jump as mules can.

Mules are said to be thinkers. They have to understand why you want what you are asking.

Horses will just do it. Mules will not. You can't beat a mule into doing anything (which is surely why mules are said to be stubborn), and if you attempt to, you will have a mule that will never work for you, as they lose all trust in you.

Both mules and horses will bond with their owner/handler and can be very protective.

Mules have a smoother gait and are more sure footed than horses. Mules tend to be less "spooky" than horses.

Mules can do anything a horse can do, including competing with horses in all venues, including dressage.

Mules are stronger and can tolerate heat better than horses, and they require less feed than horses. The mules' hooves are harder than horses' hooves, and both the mule and the mules hooves show a natural resistance to disease and insects.

Mules and horses both quickly learn the routine.

7003

Mules and Horses on the D&H

Under ground, in the mines, most of the working equines were mules. They are smaller than horses and are better adapted for work underground.

Above ground:

- in the collieries, there were more working mules than horses.
- on the railroad, the horses were more numerous than the mules.
- on the canal, most of the boats were pulled by mules, but there were a lot of horses who worked on the canal as well.

Horses and Mules Used to Build the Five Configurations of the Gravity Railroad and the D&H Canal

Statistics on the number of horses and mules that were used to construct the D&H Gravity Railroad from Carbondale to Honesdale, 1827-1829, are not available, but I shouldn't wonder if there were fifty to seventy-five teams of horses and mules that were a part of the construction team that built the 1829 configuration of the D&H Gravity Railroad.

Work on the construction of the Gravity Railroad (1827-June 1829) was put under contract on November 25, 1827. The work was under the supervision of engineers John B. Mills (nine contractors and crews) and James Archbald (eleven contractors and crews). From *Ruth*, p. 17, we learn that 31 contractors and crews worked at building the railroad between March 1828 and June 1829. Thirty-one contractors: each contractor must have had a couple of teams, possibly more. Fifty to seventy-five teams of horses to build the original configuration of the Gravity Railroad seems like a conservative estimate of the number.

What about building the configurations of 1845, 1859, 1868, and 1899? How many teams of horses were required? Those statistics do not exist as far as we have been able to determine. But given the nature of the work to be accomplished and the scope of the work to be done, not only between Carbondale and Honesdale but also in the Lackawanna Valley with the extensions of the Gravity line to Archbald and then Olyphant and then Providence and then Wilkes-Barre, I shouldn't wonder if there were one hundred and fifty to one hundred and seventy five teams of horses and mules that were a part of the construction teams that built each of these later configurations of the Gravity Railroad.

What about building the D&H Canal? Surely there must have been close to 500 teams of horses and mules used to construct the D&H Canal. Working with those teams on the construction of the canal, there must have been close to 5,000 men. On the Lackawaxen section of the Canal, alone, during the winter of 1827-1828, we learn from *LeRoy* (p. 16), that over 600 men were at work. In the caption on the pen and ink sketch of the Daniels Farmhouse and a portion of the D&H Canal at Lock 31 on the reverse of the May page in the 2008 calendar produced by the Wayne County Historical Society we read: "Approximately twenty-five thousand men with two hundred teams of mules and horses worked on [building] the [D&H] canal." More research on the question of the number of men and of horses and mules that built the D&H Canal is needed.

And let's not forget about oxen.

In the course of more than twenty years of research on the history of the Delaware and Hudson Canal Company's Gravity Railroad and Canal and on the history of anthracite mining in northeastern Pennsylvania, we have never seen any data or references that indicate that oxen were used by the D&H (1) to establish mines or in the daily operations of anthracite mining, or (2) to construct the Gravity Railroad or the D&H Canal or in the daily operations of the D&H transportation system.

Oxen, however, are especially good at working in an agricultural context and at working in the woods. Men who have worked their entire lives in the woods in the lumber industry have told the author that they would much rather work in the woods with oxen than horses. In addition, it is a recognized fact that oxen, which are slower but steadier than horses, can pull heavier loads than horses and pull for a longer period of time than horses. Oxen, too, like horses and mules, quickly learn their work schedule. In feudal Europe, we read in Will Durand's *Age of Faith* (p. 559): "The Church eased the toil of the peasant with Sundays and holydays, on which it was a sin to do *servile work*. 'Our oxen,' said the peasants, 'know when Sunday comes, and will not work on that day.' "

Given those qualities of oxen, given the nature of the terrain through which much of the D&H transportation system passed (densely forested land), and given the fact that oxen can perform any work that a horse or mule can do, I shouldn't wonder if many yokes of oxen were used by the D&H in the nineteenth century to construct (1) the various configurations of its Gravity Railroad from Carbondale to Honesdale, (2) the network of D&H Gravity planes in the Lackawanna Valley, and (3) the D&H Canal from Honesdale to the Hudson River. Oxen in the mines? Probably not.



Photo from J. Gaston's *Portland: Its History and Builders* (1911). Photo downloaded here from the Internet, where it bears the following caption: "A lumber crew, working with axes and 'misery whips' and hauling logs out on a skid road with a team of oxen, clears land in part of what today is downtown Portland in the early 1870s."

Interesting historical note on the ox and the horse from Will Durand's *The Age of Faith*:

"Till the eleventh century the ox was the draft animal; he ate less expensively, and in old age could be eaten more profitably than the horse. But about 1000 the harness makers invented the stiff collar that would allow a horse to draw a load without choking; so dressed, the horse could plow three or four times as much in a day as the ox; in wet temperate climates speed of plowing was important; so during the eleventh century the horse more and more replaced the ox, and lost his high status as reserved for travel, hunting, and war." (p. 559)

7005

The Work a Mule Can Do

From *The Coal Miners' Pocketbook*, published by McGraw-Hill Book Company (Eleventh Edition, Third Impression, 1916), we learn (p. 777) the amount of work a mule can do:

“Work of Mules.—The amount of work that a mule can do is dependent on the strength and condition of the mule, the condition of the track and rolling stock, the relative sizes of paying and dead load hauled, length of trip, presence or absence of grades that may be for or against the loads, etc. Mr. Bowron gives the following figures for mines in Alabama and Tennessee:

WORK DONE BY MULES						
Group	Average Haul Mile	Average Output Tons	Average Ton-Miles per Mule		Net Cost per Ton-Mile	Conditions
			Gross	Net		
1	.32	513	12.4	6.9	35.7	Unfavorable
2	.37	861	24.8	13.8	17.9	Average
3	.78	502	41.4	23.0	10.7	Best
4	.64	887	38.3	21.4	11.5	Average

Here is the analysis of the data that accompanies the above table:

"The average haul is the distance traveled in bringing out the loaded car; the total haul is twice this. In the columns headed Average Ton-Miles per Mule, the figures under the heading Net are for the paying load of coal hauled. The figures in the column headed Gross are based on the assumption that the car weighs 40% as much as the coal carried, but is carried twice as far. The mines in Group 1 are four in number with unfavorable conditions caused by short hauls, and steep adverse grades. In all but one of these mines, the mules were employed solely for

gathering. In the seven mines in Group 2 and the two mines in Group 4, the mules were employed only for gathering, and average conditions prevailed, the mines being fully developed, the hauls of fair length, and the track in reasonable shape, etc. In the three mines of Group 3, mules were used both for main-line haulage and gathering. A comparison of Group 2 with Groups 3 and 4 shows that better results are obtained when the hauls are of fair length, as less time proportionately is taken up in changing trips. / It is estimated that a horse or mule will exert a tractive effort equal to one-fifth of its weight at a speed of 2 to 4 mi. an hr. for 1,000 to 1,200 hr. per yr., say for 4 to 5 hr. per da. in a mining year of 200 to 220 da. In starting a load from rest, a much greater effort is exerted for a limited time. / When gathering single cars, where the most distant room is not much over $\frac{1}{4}$ to $\frac{3}{8}$ mi. from the parting, a mule should make two to three round trips per hour, and bring in fifteen to twenty-five loads per day. In seams of moderate thickness where the cars hold, say, 1.5 T., this means the delivery of a paying load of from 22.5 to 37.5 T. per da. In thick seams, where the load is 2.5 to 3 T., the production per mule will vary between 60 and 75 T. / In hauling from an inside parting to the drift mouth, where the distance is from $\frac{1}{2}$ to $\frac{3}{4}$ mi., and the grades are such that a mule can haul two loaded cars, one animal will deliver from thirty to forty loaded cars per day, equivalent to a paying load of from, say, 45 to 100 T., depending on the size of the car. / These results cannot be obtained unless the management is competent, and see to it that the rails, roadbed, and cars are in first-class condition, that the miners are properly distributed so that there are no unnecessary delays at the face in waiting for loads, and that the mules are well fed, well shod, and properly cared for. / When the seam is pitching and the entries are crooked with irregular grades and the track is soft, as in the anthracite fields of Pennsylvania, no average figures can be given because the conditions vary so from mine to mine, but in general, the efficiency of a mule is about one-half that of the same animal in flatter and more regular seams."

The seams in the anthracite mines in Pennsylvania are described in this McGraw-Hill pocketbook as "pitching and the entries are crooked with irregular grades and the track is soft." As such, the efficiency of a mule in the anthracite mines of Pennsylvania is understood to be about one half of that of a mule in the mines where average conditions prevailed. As such, the Net Cost per Ton-Mile for the mines in Groups 3 and 4, above, is to be seen as twice the net cost per ton-mile in the anthracite mines of Pennsylvania, i.e., 10.7 and 11.5 respectively. The Net Cost per Ton-Mile in the anthracite mines of Pennsylvania is, therefore, one-half of 10.7 (or 5.3), or one-half of 11.5 (5.7).

What an extraordinary document the above passage from *The Coal Miners' Pocketbook* on "Work of Mules." It is daunting to think about the research behind the following statement from the text given above titled "Work of Mules":

"It is estimated that a horse or mule will exert a tractive effort equal to one-fifth of its weight at a speed of 2 to 4 mi. an hr. for 1,000 to 1,200 hr. per yr., say for 4 to 5 hr. per da. in a mining year of 200 to 220 da."

It would not be surprising to learn that there were some mines in the anthracite region where the use of mules to move cars in the mines was approached from the scientific perspective inherent in and prescribed by the guidelines in the text "Work of Mules" given above. But it seems probable that in most mines, in most instances, the procedures followed in the use of mules were the result of a common sense understanding of animal husbandry and practical experience in the use of mules as partners in the effective and humane mining of anthracite coal.

Cost of Mule Haulage

What is the cost of mule haulage? The answer is given in this extraordinary handbook, *The Coal Miners' Pocketbook* (first published in 1890; eleventh edition, third impression published in 1916), on pages 777-78 as follows:

"Cost of Mule Haulage. – In order to compare the cost of haulage at one mine with that at another, haulage costs should be given in cents per ton-mile; that is, the cost of hauling 1 T. of coal 1 mi. Further, the underground conditions should be known, for it is possible that there is greater efficiency where the cost is, say, 15 c per T.-mi., than where it is but 10c. / The cost of mule haulage is made up of three items; depreciation, feed and care, drivers' wages. / If ten working mules per day are required for a given tonnage, eleven must be provided, as one is practically certain to be laid up for the time being, either sick or crippled. If the life of an American mine mule is but 5 yr., and his cost \$250, \$55 must be allowed annually per working mule for renewals, on the basis that 10% of the stock is idle. / If the mule is fed 12 lb. of corn and oats in equal proportions and 15 lb. of hay per day, his total food consumption will be 5,475 lb of hay and 2,190 lb. each of oats and corn per year. At \$25 per T. for hay, 45 c. per bu. of 32 lb. for oats, and 80 c. per bu. of 56 lb. for shelled corn, the individual cost of these items will be \$68.44, \$30.80, and \$31.29, or a total of \$130.53 per yr. Allowing for the feed of the idle mule, the annual cost per working mule will be \$144.06. The wages of the stable boss, harness, shoeing, services of veterinarian, etc., will be fully \$60 per yr. per mule at large mines and from \$100 to \$125 per yr. at small ones. Allowing for the idle stock, probably \$90 per yr. is a reasonable charge. One working mule will therefore cost \$55 for renewals, \$144.06 for feed, and \$90 for stable charges, etc., or a total of \$289.06 per year of 365 da., or 79.2 c. per da. However, the mines do not run 365 da. per yr., the working days averaging about 220. On this basis the fixed charges per working mule per working day will be \$289.06 divided by 220 = \$1.314. To this must be added the driver's wages, which at present vary from \$1.75 to \$2.50, averaging, say, \$2.125, making the total cost per working mule per working day, \$3.439. The cost per ton of coal shipped is found by dividing the cost of all the mules by the total tonnage. Thus, if ten mules at a total cost of $10 \times \$3.439 = \34.39 handle an output of 900 T., the cost per ton is $\$34.39$ divided by 900 = 3.821 c. If the average distance hauled is $3/8$ mi., the cost per ton-mile of output is $3.821 \times 3/8 = 10.189$ c. Since each mule delivers an average of 90 T. hauled $3/8$ mi., the ton-mileage per mule is $90 \times 3/8 = 33.75$. Assuming the cars to hold 2.5 T., the output requires the delivery of 900 divided by 2.5 = 400 cars per da. If the cars weigh 1 T. each, the total weight handled by the ten mules per day will be, coal 900 T., outbound loaded cars 400 T.; inbound

empty cars 400 T.; or a total of 1,700 T. hauled $3/8$ mi. at a cost of \$34.39. This is equivalent to 637.5 T. hauled 1 m. for ten mules, or 63.75 T.-mi. per mule, at a cost of \$34.39 divided by 1,700 = 2.02 c. per T. gross (cars and coal) of material hauled, and \$34.39 divided by 637.5 = 5.4 c. per T.-mi. / The haulage costs given by Mr. Bowron in the preceding table are based on drivers' wages of \$1.762; depreciation \$25 per mule per year; feed and stable attendance 34.9 c. per da. for 365 da.; interest 3.3 c. per da. for 365 da.; making the total cost per working mule per working day, of which there were 276 in the year, \$2.46. / In the reports of some coal mining companies, a charge of 50 c. per da. per mule is made for all items other than drivers' wages. This is, obviously, altogether too little."

Summary statement: Total cost per working mule in the mines per working day: \$2.46.

Also, in the *McGraw-Hill Coal Miners' Pocketbook*. . . , on page 778, there is an interesting discussion of the grades at which mules should be worked:

"Safe Grade for Mule Haulage.—While the grade against empties on the main haulways can be 1.5% the grade on cross-entries should not exceed .5 to 1%, where mules must gather cars in a hurry. If the mules are winded in taking in empties, the loaded cars must necessarily come out slower, so that the advantage gained by quick delivery of empty cars is offset by the loss of time in returning the loaded cars. Often mine mules are injured by winding them and then not giving them time to recover their breath for the return trip. The driver has not so much control over his car and animal that he can stop instantly, and if the mule lags or stumbles, the car will probably run against the mule and injure its legs. A safe down grade for mule haulage should not exceed 3% and great care will be needed in that case. On such steep grades, while the mule can pull up the ordinary mine car, the brakeman or driver should run the car down independent of the mule. A loaded mine car will slide on rails even with four wheels spragged when the grade is 6 to 8%, depending on the condition of the rails."

7006

Selecting Mules for Work in the Mines

Who was officially in charge of the D&H horses and mules? In 1872, it was Emons Eaton, whose job title was "Superintendent of the lumber business and agent for the supply of horses and mules for the Mines and Railroad of the Del. & Hud. C. Co." When Emons Eaton became ill and went West in 1872, for health reasons, his position was filled temporarily by T. B. Seley, Esq., from Afton, NY:

"New Superintendent. / Our readers will recollect our notice of the illness of Emons Eaton, Esq., and his necessary trip West. This has produced a temporary vacancy in the responsible position Mr. Eaton has for several years very acceptably filled, of Superintendent of the lumber business and agent for the supply of horses and mules for the Mines and Railroad of the Del. &

Hud. C. Co. / T. B. Seley, Esq., an energetic and active gentleman, recently of Afton, N. Y., has been introduced in town as Mr. Eaton's substitute, to perform his duties during his absence, which will probably extend through the Summer." (*Carbondale Advance*, June 29, 1872, p. 3)

On the question of selecting mules for work in the anthracite mines, we read the following in the *McGraw-Hill Coal Miners' Pocketbook*. . . , p. 775:

"Selection of Stock.—While horses and ponies are generally used abroad for mine haulage, mules are preferred in the United States, as being hardier, less nervous, and more easily broken to their work. Large heavy mules with long backs and relatively short legs can exert their strength to greater advantage than short-bodied long-legged ones, although this is not always admitted. Mere weight is not an indication of strength, as it may be due to fat, but a good working weight, say up to 1,400 lb. without clumsiness or thick hocks, is to be desired in a mule. Perhaps the best mules come from Missouri and Kentucky and, for mine use, have an average weight of about 1,200 lb. and a height of about 16 hands. / Mules from 4 to 6 yr. of age that have been worked are easier to break to mine work than those without training of any kind. Mules are naturally influenced by changes of water, diet, altitude, etc., and before being tried in a mine should be given ample time to become accustomed to their new conditions. If this was always done, probably a much smaller number would be rejected as being unsuited to mine work, for a mule cannot be expected to work when it is not well. / While some mules give absolutely no trouble when first taken into the mine and will pull loads from the outset, the average mule has to be broken, and for this purpose should be handled by two men, the driver and an expert in managing stock. At first the load should be light, the trips short, and the mule not worked for more than 2 or 3 hr. The load, length of trip, and number of hours worked may be increased daily. When properly harnessed and cared for and, above all, kindly treated, the average mule soon learns his duties, will back up to the trip without command, and will follow his driver's call or whistle."

Horses and Mules Learn the Routine

Working Animals:

Those of us who are fortunate enough to live around and work with animals know that working animals very quickly learn what is expected of them, and do what has to be done, in perfect sequence and automatically.

The author's mother's family owned and operated the Russell Dairy Company in Carbondale. Helen (Russell) Powell told the author:

"The horses that pulled the milk wagons that delivered to the houses in town [Carbondale] knew their routes so well that the drivers only had to load the wagons and give the horses free rein. The horses would stop at each house, in order, on the milk route, and when the driver returned to the wagon, having delivered milk at one stop, the horse would then go to the next house. At the end of the run, the horse went back to the dairy."

This same learned behavior characterized a great many of the horses and mules that worked for the D&H, both underground and above ground, both on the railroad and the canal.

In that regard, we read in the biographical portrait of John J. Kalligan in the September 1, 1931 issue of *The Delaware and Hudson Railroad Bulletin*, pp. 259-60, 68:

"Ordinarily it took from four to five days to haul a boat that distance [108 miles] with a team of two horses, although when traffic was brisk the entire trip was sometimes made without removing the horses' harnesses, thereby cutting the running time considerably. . . . When night descended they passed on until a lock was reached, no matter if it took until morning, so that another boat could not pass theirs while they slept. / At times as many as eight or ten boats would be grouped at a lock waiting to be 'locked through.' The horses were so well trained that they would stop a safe distance from the boat ahead. While awaiting their turn, the animals grazed beside the towpath. / 'Come ahead loaded boat,' shouted from the lock, meant that the operator was ready for the next Roundout-bounded boat. Immediately upon hearing this cry, the horses would start up, whether or not the driver was on hand to urge them forward. [emphasis added] / Mr. Kalligan recalls an incident which clearly shows the high intelligence of the canal horses. At intervals along the canal a man with a horse and two-wheeled cart was stationed: It was his duty to locate and report any leaks in the canal walls, local water shortages, or infraction of the rules. To prevent trespassers driving carriages along the towpath, closely-spaced posts were driven in the ground beside the canal. / Drivers were under strict orders to be out on the towpath when the boat was in motion, although many of the horses were so well trained; that they would make the entire trip without mishap if left to themselves. One day while the driver was eating his dinner aboard the boat, the horse passed on the outside of one of the posts. Had this fact been unnoticed, when the boat passed the post, the fouled rope would have pulled the horse into the canal. One of

the inspectors, driving from the opposite direction, saw what was about to happen. / 'Get back around the post,' he bellowed at the top of his voice. The animal stopped, wheeled about, walked around the post again, and proceeded. The inspector, amused by the incident, laughed heartily and cautioned the driver as the boat went by."

Similarly, we read in the biographical portrait of Joseph Flederbach that was published in the July 1, 1927 issue of *The Delaware and Hudson Company Bulletin*, pp. 199-200, that in July, 1881, Flederbach went driving on the towpath.

"Two mules were his charges. By starting at 5 o'clock in the morning and driving until 10 o'clock in the evening he would average about twenty miles with a single boat or by leaving Honesdale on Monday morning he would reach tidewater by Saturday afternoon. . . Enroute during the day, he was accustomed to allow the mules to 'go by themselves' while he boarded the boat for his meals. [emphasis added] Then on arriving at Rondout they would be left with a caretaker while he would accompany the boat to New York and return, when he would again tow it back over the 108-mile water route to Honesdale. / Quitting the tow path where he had received from twelve to fifteen dollars a month and board, he was first employed as a dumper on the Union dock from July, 1894, until March 31, 1899."

At the beginning of Chapter 3 in *Growing Up in Coal Country*, Susan Campbell Bartoletti uses the following epigraph in the National Archives by an anonymous author: "My first day, I asked the stableman who was going to show me how to handle the mule [in the mines] and do the job. He informed me that if I wished any information on the subject, I should ask the mule. He told me watch the mule and learn something. I led the mule to the rock tunnel, where a line of empty cars waited. As we approached, he drew up before the last car and almost told me to hook a car [onto him]. Sure enough, my mule knew the job from A to Z, and he was a very good teacher."

7008

Horses and Mules Used to Mine and Market Anthracite Coal before the Gravity Railroad Was Built

Years before the Gravity Railroad opened, horses and mules were used by the Wurts brothers to mine and develop markets for their coal.

In the autumn of 1822, the Wurts Brothers formed the Lackawaxen Coal Mine and Navigation Company and mined, using mules, 1,000 tons of coal at Carbondale. In the winter of 1823, the Company hauled the first 100 tons of coal from Carbondale, over the Moosic Mountain, on sleds, pulled by horses, to the Lackawaxen River (near present-day White Mills). The coal was then sent by raft to Port Jervis, and then, on the Delaware River, to Philadelphia, where it sold for between ten and twelve dollars a ton.

On January 7, 1825, the Wurts brothers organized a coal burning demonstration in the Tontine Coffee House (NW corner of Wall and Water Streets) in New York City. Such demonstrations had taken place in New York for no less than a month before this January 7 demonstration. At the Tontine Coffee House on January 7 (also at Goshen and Kingston) stock in the D&H was offered for sale. The stock was largely oversubscribed. The coal for these demonstrations had been rafted to Philadelphia from northeastern Pennsylvania and then shipped by boat to New York.

To get this coal to Philadelphia, horses were used to get the coal from the Lackawanna Valley to the Lackawaxen River and the Delaware River so that it could be rafted to Philadelphia.

Using horses to pull loads of coal from the Lackawanna Valley to those rivers and later to the D. & H. Canal at Honesdale (before the Gravity Railroad opened) was an expensive proposition. In *Mathews* (p. 235) we read:

"Prior to the building of the railroad twenty or thirty teams were engaged in conveying coal from the mines to the canal in loads of from one to two tons each. The cost was \$2.20 per ton when sledges were used upon the snow and \$2.75 when wagons were employed. This slow and tedious means of transportation made the coal cost the company a total of \$5.25 at tide water."

7009

Horses and Mules on the Gravity Railroad from October 9, 1829 to 1899

Mining the Coal and Getting It to the Surface:

1. Wheelbarrows operated by men.

In the early drift mines, the coal was removed from the mines by men using wheelbarrows.

2. Coal cars drawn from the mines by horses and mules.

Later, when the mines went deeper into the coal beds, tracks were laid on which the coal cars were hauled by horses or mules out of the mines.

3. Coal cars drawn from the mines with a lifting sweep powered by a horse.

What is a sweep? A sweep is a hoisting device that is actuated by an animal, usually a horse or a mule. A sweep consists of a long pole or timber pivoted on a tall post. A sweep is sometimes used to raise and lower a bucket in a well. They were also used to lift coal from the mines.

We know that the D&H used a sweep to lift coal cars from the mines because of the article that was published in the January 17, 1833 issue of *Northern Pennsylvanian* about a fire that destroyed the D&H sweep. Here is that article:

“Fire. / On Monday morning, last, the citizens of Carbondale received another warning to prepare for their preservation against this fearful Destroyer of property. The house of Mr. Roth, opposite the Methodist church, was discovered to be on fire. It was however extinguished, without much damage. / Also, about one o’clock on yesterday morning, the building known as the “Sweep,” belonging to the Del. and Hud. Canal Co. in which horses were used to draw Cars from the Coal Mines, [emphasis added] caught fire and was entirely consumed. The appearance of the fire was truly alarming, being situated within twenty feet of the wooden powder houses, containing between 3 and 400 kegs of powder.” (*Northern Pennsylvanian*, Thursday, January 17, 1833, p. 2)

Thomas Dickson, who later became president of the Delaware and Hudson Canal Company, began his career with the D&H in 1837 by driving the large mule that was harnessed at the company's lifting mine sweep.

About this initial work experience of Thomas Dickson with the D&H, we read the following in J. A. Clark's *The Wyoming Valley, Upper Waters of the Susquehanna, and the Lackawanna Coal-Region*:

“Thomas [Dickson] learned to read and write in Scotland; attended school in Canada, and in Carbondale, until the winter of 1837, when he had a quarrel with his school-master—the only one in the place—which resulted in a determination to leave, and being unwilling to remain a burden on his parents, offered his services to George A. Whiting, who was then in charge of the horses and mules of the Canal Company. / His services were accepted, and he was engaged in driving in and about the mines of the company during the summer of 1837. . . * / A mule drier in the Anthracite coal mines in the year 1837, and President of the Delaware & Hudson Canal Company, one of the largest railroad and transportation companies on the American continent in 1869, affords a striking contrast indeed. . .” (p. 155, p. 158)

**Logan*, p. 40: Dickson only worked at the sweep for a week, or ten days. He then accepted an offer for fork from Charles T. Pierson, a merchant in Carbondale, as a clerk and boy of all work. "With this offer he went to his employer, and resigned his position at the sweep. The superintendent kindly dismissed him, and sent him to the paymaster for his wages. This paymaster happened to be Deacon Marvine, and the father of the little miss who in due time became Mrs. Thomas Dickson. . . The Deacon congratulated his little friend on his finding employment worthy of his ambition and standing, and paid him an extra dollar for the excellent care he had taken of the animal committed to his charge."

Working in the D&H sweep, Thomas Dickson worked for George A. Whiting, who was in charge of the horses and mules for the D&H.

In an article about George A. Whiting and Jesse Williams in the *Carbondale Advance* of May 9, 1874, p. 2, titled “Scenes in Carbondale Thirty Years Ago,” by J. R. Durfee, we read the

following about George A. Whiting: "He spent the most of his life as agent of the Del. & Hud. Co., in the purchase and management of the horse department, overseeing the teaming, &c. His life was that every day round of business that we have but little to record."

In the 1850 U. S. Federal Census for Carbondale, Luzerne County, Pa., p. 695, there is a listing for "Geo A. Whiting" and family. There, George A. Whiting, a 46-year old male who was born in the state of Massachusetts, is listed as an "Agt for Co.", which is identified as the "DHCCo." His wife, Jane, age 36, was born in Vermont. Their six children: Sarah, 18, George 12, Stephen 11, Wm. 9, Washington 5, and Edward 3.

In 1895, Charles W. Whiting wrote an extraordinary article on the D&H Gravity Railroad ("An American Gravity Railroad," *Cassier's Magazine*, Volume VIII, June, 1895, No. 2, pp. 83-96). It wouldn't surprise me to learn that Charles W. Whiting was a grandson of George A. Whiting.

Once the coal was outside of the mine it then had to be conveyed to the foot of Plane No. 1. Initially horses were used to draw the cars from the mines to the foot of Plane No. 1. When the Gravity Railroad opened in 1829, horses were used on the level from the mines to the foot of Plane No. 1.

When the Gravity Railroad opened in 1829, it will be recalled, there was a 300-foot long plane and a 2,000 foot long level, operated by horsepower, from the mines to the foot of Plane No. 1. Here is what Torrey said about that plane in 1882:

"Starting at the mouth of the mine at Carbondale, the railroad commenced with a short inclined plane 300 feet long, ascending 30 feet, (or 1 foot in 10,) which was operated by horse-power. From the head of this plane the grade was near the natural surface of the ground a distance of 2000 feet to the foot of steam plane No. 1, ascending in that distance 45 feet (or 1 foot in 44.) This grade was so heavy that is required one horse to each car carrying three tons of coal." (*Torrey*, 1882)

Re-cap: Horses were used to draw the coal cars to the foot of Plane No. 1, 1829-1836

Using horses to draw the coal cars from the mines proved too expensive, and so in 1836/37 a water-powered hoisting engine was installed on the 1,000 foot plane from the mines ("the opening of which may still be seen in the base of the West Side bluff" said William Johnson, Sr. in 1902) to the foot of Plane No. 1. The cars were raised 80 feet by this waterwheel. (This water wheel was 300 feet north of the two waterwheels that were installed at the base of Salem Avenue in 1853.)

With loaded coal cars at the foot of Plane No. 1, let's now follow a cut of coal cars over the Moosic Mountain to the D&H Canal basin at Honesdale.

At the foot of Planes No. 1, the loaded coal cars were attached, by means of a sling, to the up-hill

chain on the plane and pulled to the head of the plane, where they were un-hooked from the chain and sent onto the level. From the head of one plane to the foot of the next, the coal cars were pulled by horses.

When the Gravity Railroad opened on October 9 1829, there were five single-tracked inclined planes (each with a turn-out of perhaps two hundred feet in length in the middle of the plane) between the valley floor in Carbondale and the summit of the Moosic Mountain above Carbondale. The planes were on a gradient of about fifteen to twenty per cent. At the head of each of these planes there was a stationary steam engine. The coal cars were moved through these planes, with horses moving the cars on each of the levels.

Stables for the horses that worked on the levels were provided along the line of the railroad. One such stable was located between Planes 2 and 3. This we learn from Joslin/Davies when they speak of Elias Thomas:

“One of the well known figures on the gravity, while horses were used, was Elias Thomas. The company had a stable between Nos. 2 and 3, where the horses used on the several levels were kept. Mr. Ball used to say that Thomas was as good as a barometer. As he passed over the line he would say to Thomas, “What kind of weather are we going to have?” His answer would be, ‘Fair, the salt is dry’ or ‘rain, the salt is moist.’ Salt was supplied him by the barrel, for the use of the horses, and if it was dry even though a storm had not cleared up, the salt would indicate a clearing up by its being dry and while it was still fair an approaching storm was indicated by the moisture of the salt.” (*Joslin/Davies*)

In the period after 1845, when the loaded levels were first sloped to the East, it sometimes happened that the forward motion of a cut of coal cars on a level would be interrupted by natural causes (weather, debris on the track) or un-natural causes (boys in the neighborhood). When that happened, a horse would have to be used to re-start the forward motion of the cars. This we know from the biographical sketch of George Lorenz that is given on pages 83-84 of the June 1, 1934 issue of *The Delaware and Hudson Railroad Bulletin*. Therein we read the following:

"Nowadays, when a freight train stalls on a grade the engineman has a number of alternatives: he can back down and get a fresh start, he can cut the train into sections and take up one at a time, or, if another locomotive is available, he can call for assistance. In the early days if a train, which ordinarily ran down the slope between adjacent planes by the force of gravity, stopped midway between, the runner had to walk to the foot of the next incline to get one of the powerful horses which were stationed there for emergencies of this type. Returning to his train he would start it with the assistance of the horse and then complete the interrupted run. Not infrequently the boys of the neighborhood, who frequently rode the cars along the levels, would deliberately stop a run of cars to annoy the crews. When one of the culprits was caught he was given a sound thrashing, although it is doubtful whether this discipline had any other effect than to cause him to repeat the prank at the very next opportunity. . ."

Having been moved up the mountain through the five planes in 1829, the loaded coal cars were moved onto Level No. 1, the Summit Level.

This level was 9,250 feet long (1 $\frac{3}{4}$ miles), with a descending grade of 8 feet to the mile. The loaded coal cars were pulled across this level by horses, with one horse needed for every two loaded cars. This we know from Alfred Mathews' *History of Wayne, Pike and Monroe Counties, Pennsylvania* (1886, p. 236). Therein we read that the Summit Level, in 1829, crossed the turnpike road "about $\frac{3}{4}$ of a mile west of the present [1886] 'light track' summit. . . On the Summit Level one horse could not draw more than two loaded cars at a time."

After the loaded cars had been pulled across the top of the Moosic Mountain by horses, they were lowered down the mountain from Farview to Waymart through Planes Nos. 6 and 7.

Once down the Moosic Mountain, the cars were sent down the Six-mile Level by gravity to Prompton, where they were let down Plane No. 8, in the same manner as on Planes 6 and 7, to the Four-mile Level, down which the cars, five at a time, were drawn by a horse to the Canal basin in Honesdale. When the loaded cars went down the Six-mile Level and the Four-mile Level, horse cars carried the horses that would pull the empties back up those levels. One horse could pull five empties back up the Four-mile Level; one horse could pull four empties back up the Six-mile Level.

Speaking of the 'summit level,' the 'six mile level,' and the 'four mile level,' in 1882, Torrey said the following:

"It was originally expected to make use of locomotive power on the three long levels, known as 'summit level,' 'six mile level,' and 'four mile level,' and to use horses on the other levels between the planes. / Three locomotives [emphasis added by the author for reasons that will become clear later in this study] were made for the company in England under directions of Horatio Allen, and brought to New York to be so used, but on the trial of one of them, the track was found too weak to admit of their use with safety; and the use of horses was thus made necessary on those levels also. / On the summit level one horse could not draw more than two loaded cars at a time. / On the six mile level, between Waymart and Prompton, the grade was such that loaded cars descended by gravity, and cars were provided with a sufficient number of horses to ride with each train, to draw the empty cars back—one horse being thus able to return four empty cars. These horses became so accustomed to riding down the grade that when, by reason of ice on the rails, the cars required force to propel them, some of the horses clearly showed an unwillingness to go upon the track and draw the cars in that direction. / On the four mile level, between Prompton and the canal basin, the grade was such that one horse could draw five loaded cars down, and the same number of empty cars back. / The four-mile and the six mile levels had each a branch or side track for a short distance, near the centre, so that cars moving in one direction could pass those going in the opposite direction, and at these branches were the

boarding-houses for the car runners. One of these boarding houses was near the present residence of Jacob L. Keen, and was kept by Warren Dimock, and the other was opposite the present residence of Henry L. Phillips, and was kept by George M. Keen.”

After the loaded coal cars had been emptied at Honesdale at the Canal basin, the cars, now empty, or light, had to be returned to Carbondale and to the mines.

To return the empty cars to Carbondale, they were pulled, five at a time, from the canal basin back to the foot of Plane No. 8 by horses. The cars were drawn up the plane by the weight of descending loaded cars, the empties serving as a partial counterbalance. From the head of Plane 8, the cars were also pulled, four at a time, by horses back to the foot of Plane 7. The cars were then drawn up Planes 7 and 6 to the top of the Moosic Mountain at Farview by the weight of descending loaded cars. Horses then pulled the empties back across the Summit Level to the head of Plane No. 5, where the cars were let down back through the system to the foot of No. 1. On all the levels between the planes on the Moosic Mountain, horses moved the cars—loaded and light.

The effective movement by horses of the coal cars on the Six-mile Level and the Four-mile Level between Honesdale and Waymart, required the use of rail cars in which horses could ride down those levels with the loaded cars in order that they might then draw up empty cars back up those levels. Here are the words of John Jervis on this question:

"From the foot of the second descending (or self-acting engine) plane commences a descending road quirally inclined 1 in 120 for near six miles. The loaded waggons, in trains of from 20 to 30, descend this section by their own gravity, being kept in proper control by the friction brakes attached to them, which are managed by from two to four men, according to the number of waggons in the train. There are several small waggons attached to the train, on which the horses ride down with the loaded waggons to draw up the empty ones. This method of transporting the horses has proved very advantageous in economizing the expense. Experience has shown that the best declivity for a descending trade [grade?], when animal power is used, is that on which the loaded carriages will just descend with proper velocity, by their own gravity. The extra power required to return the empty waggons being more than compensated by the advantage the animal obtains in riding down with the load." (see Jervis, on page 100 in the volume on the 1829 configuration)

More on the Horse Cars:

In the archives of the Pike County Historical Society at Milford, PA, we discovered, on 09-20-2103, eleven blueprints showing line drawings of 1829 Gravity Railroad rolling stock or trackage or features of the D&H Canal and its locks. All of these blueprints were created, it appears, at the time when E. D. LeRoy wrote *The Delaware & Hudson Canal and It's Gravity Railroads*, which was published by the Wayne County Historical Society in 1980.

In the lower right-hand corner of these blueprints, we read: "EX LIBRIS / E. D. LeRoy," followed by a number. The numbers appear to indicate a number in a sequence of blueprints which E. D. LeRoy apparently had produced of old documents relating to the D&H Canal Company. It appears that he had these blueprints created as a way of preserving fragile old documents about the D&H. One can not help but wonder if those fragile old documents still exist.

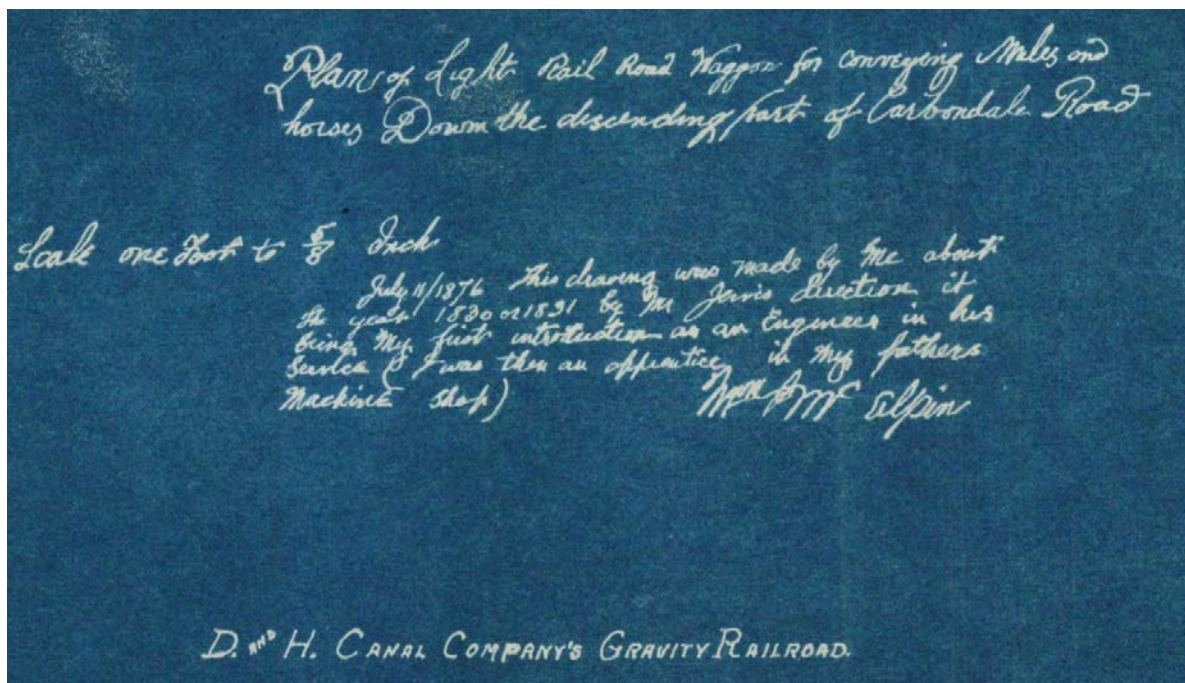
Here is a summary description of those eleven blueprints:

1. #17 paddle gate irons for locks on D & H canal
2. #221 Gilson's locks: survey by Lord, Butler, April 1854
3. #223 Baisden's lock (with #225 on the same blueprint): survey by Lord, Butler, April 1854
4. #224 Ridgeway's locks: survey by Lord, Butler, April 1854
5. #225 Pool-Pit Basin [at the Narrows of the Lackawaxen River]
6. #264 roll ways
7. #265 dry wall lock with timber and plank facing
8. #266 light rail road wagons for mules and horses
9. #267 coal waggons
10. #268 mitre sill and gate recesses for locks; re-drawn from original plans of 1827
11. No number lock gates for the Delaware & Hudson Canal, upper and lower gates, type used 1827-1850

How many blueprints were produced? It appears that there were no less than 268. There are eleven in the Pike County Historical Society archives. If there were others, do they still exist?

One of those blueprints, numbered 266, shows three line drawings of "Plan of Light Rail Road Waggon for conveying Mules and horses Down the descending part of Carbondale Road."

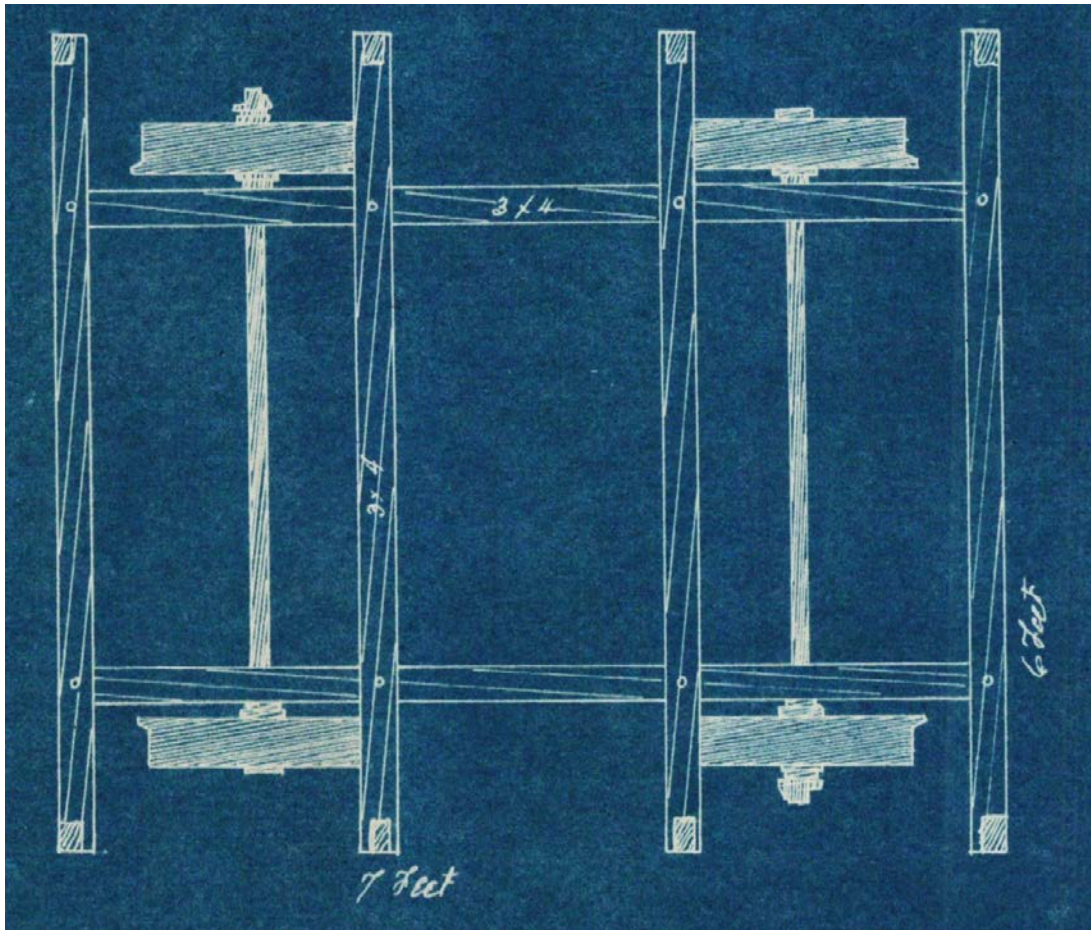
A scan of the note on this blueprint ("Scale one Foot to 5/8 Inch") is given below:

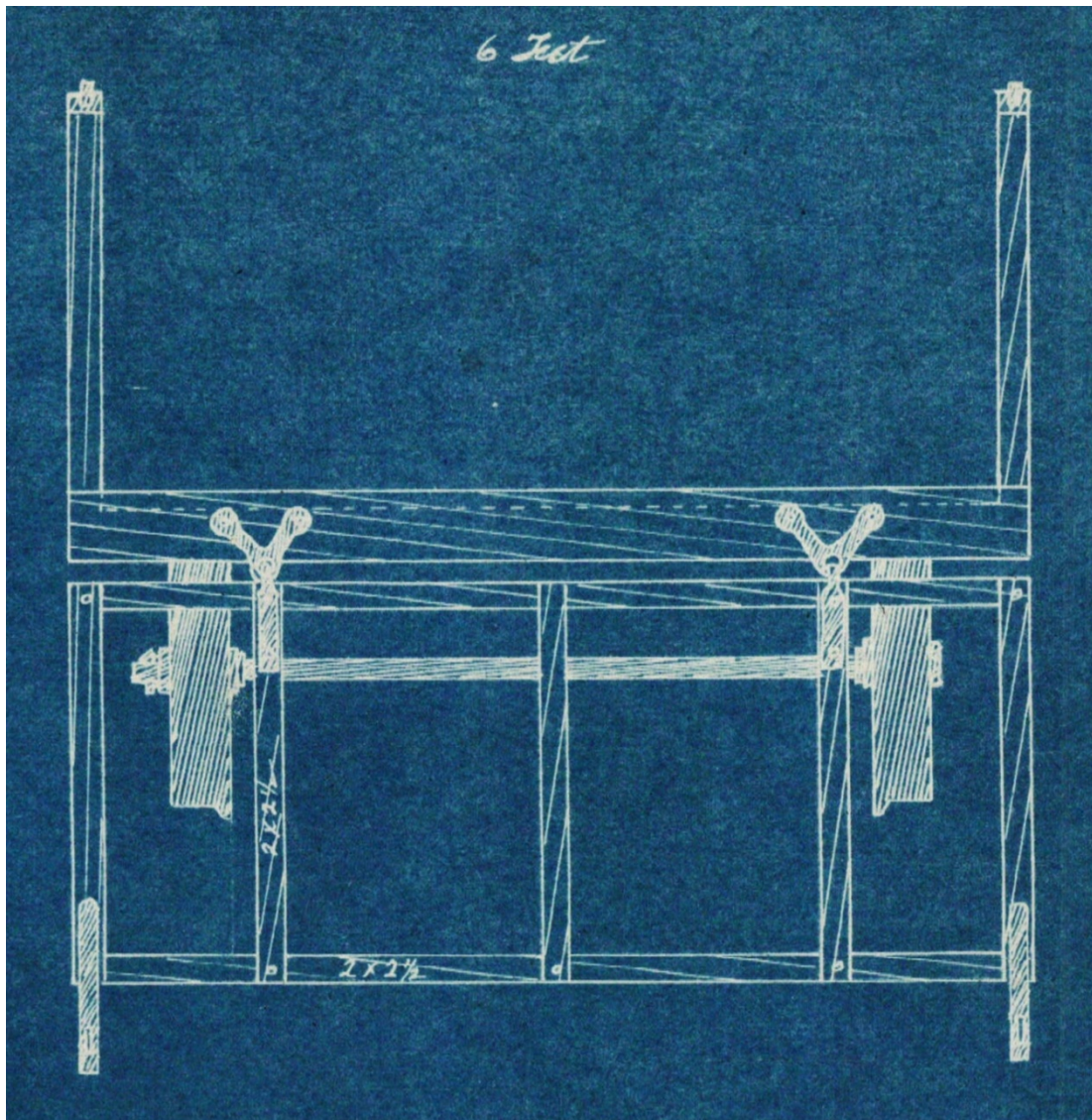


On the original drawing of this plan for the horse and mule cars used on the Six-mile level and the Four-mile level William Jervis McAlpin wrote (see above blue print), on July 11, 1876 the following:

"July 11 / 1876 This drawing was made by me about
 The year 1830 or 1831 by Mr. Jarvis direction it
 Being My first introduction as an Engineer in his
 Service (I was then an apprentice in My fathers
 Machine Shop) Wm J McAlpin"

Here are the three line drawings by William J. McAlpin for the railroad wagons for horses and mules on the Six-mile Level and the Four-mile Level:





Horses played an important role in the movement of empty coal cars to the Powderly mines, south of Carbondale:

Loaded coal cars moved from the Powderly mines, south of Carbondale, to the foot of Plane No. 28 by gravity. Empty coal cars were moved from the area behind present-day Trinity Episcopal church back to the Powderly mines by horses. This we know from an undated newspaper article titled "The Celebrated Gravity Road" (probably published in the *Carbondale Leader* in the 1890s) in the archives of the Historical Society. Therein, the author states:

"In order to get the light cars to Powderly mines before this [the extension of the Gravity Railroad to Archbald in 1845-46], they were let down plane 28 [in Carbondale, in the area behind the Trinity Episcopal Church], which was then [1846] run by water, and pulled back to the mines by horses. Each horse drew four coal cars and a horse car on which he rode back."

After the extension of the Gravity line south to Archbald, the empty cars for the Powderly mines would have been taken up the Blakely Plane and moved onto the Blakely Level, and then lowered, by gravity, from the Blakely Level to the Powderly mines.

With the extension of the Gravity Railroad to Archbald in 1845, horses and mules (belonging to the D&H and others) played a key role not only in the movement of loaded coal cars from mines in Archbald to the foot of the mountain in Archbald (Plane B) for shipment to Carbondale but also, as horses and mules working for the D&H, in the movement in the late 1840s of some astonishing freight, namely 1,500 tons of iron rails, from Archbald to Lackawaxen, via the D&H Gravity Railroad from Archbald to Carbondale to Honesdale and then via the D&H Canal from Honesdale to Lackawaxen.

The remarkable events to which we refer are detailed in an article that was originally published in *The New York Times* and later published in the *Carbondale Leader* of September 21, 1874 (p. 4):

"Erie's Early Troubles. / HONESDALE, August 28.—The work of narrowing the gauge of the Erie Railway, which is progressing rapidly along the line, recalls one of the most interesting and important incidents in the history of the pioneer of American trunk lines—an incident by which the New York and Erie Railroad Company was enabled to save the forfeiture of its franchises to the state [NY], and by which another struggling corporation was enabled to raise itself from insignificance and probable bankruptcy to be one of the most wealthy and powerful of its kind in the country. / After the great financial revulsion of 1836-7 had compelled the suspension of early operations on the railroad, the state came to the aid of the company, and in 1838 loaned it its credit to the amount of \$3,000,000. This large amount of money was used up, and only 61 miles of the road in operation in 1845--from Piermont, on the Hudson, to Otisville, the summit of the Shawangunk mountains, in Orange County. Not a small share of the company's means had been spent in carrying out the ridiculous idea of its engineers that rails must be laid on piles from Owego to Hornellsville. For a distance of 90 miles two rows of heavy posts were sunk in the earth. Each one of these posts stood for many a year afterward as a monument to the memory of millions of wasted riches, for they were never used, and the last one disappeared from the side of the present route only a few years ago. / In 1845 the state came again to the aid of the railroad enterprise. By act of the assembly of that year the company was released from the claim of the state against it, and liberal provisions were made as to subscriptions to new stock. This legislation was accompanied with the proviso, however, that unless rails were laid and the road was in working order between the Hudson and Binghamton by January first, 1849, the company

should forfeit all its rights, franchises, and titles to the state. Thus given a new lease of life and another replenished Treasury, the directors of the company again ordered the work to proceed. The rails with which the road was ironed between Piermont and Otisville was of English iron, which cost \$80 a ton. The straitened circumstances of the company, and the time to which it was limited, required the obtaining of iron at a cheaper rate and in a more convenient market. / At that time [1845], the manufacture of railroad iron was an entirely new industry in this country. Up to 1845, no T-rail had been made here, the strap-rail being used. The New York and Erie imported the first T-rail on this side of the ocean. In 1843, Colonel George W. Scranton and Seldon T. Scranton of Oxford, N.J., established a rolling mill and rail factory in the village of Harrison, now the city of Scranton, Pa. It was known as the Lackawanna Iron Works. In 1846 the Scrantons, knowing that the New York and Erie Railroad Company had paid \$80 a ton for the rails imported from England, and that it was necessary for iron to be obtained by the company at a lower price made a contract with the railroad company to furnish it with 10,000 tons at a rate much less than that of the English iron. At the time of making this contract, the iron company had no machinery capable of turning out the rails, and furnaces and all had to be provided. The iron was to be delivered to the New York and Erie Railroad's agents at the mouth of the Lackawaxen river, in Pike county, Pa., during 1847-8. A number of prominent capitalist interested in the success of the railroad loaned the Scrantons \$100,000, with no security but their word. The machinery for the iron mills was drawn 60 miles by teams, and was ready for operations in a few months. As fast as the iron was ready it was drawn by teams nine miles to Archbald, Pa., then the southern terminus of the gravity road of the Delaware & Hudson Canal Company. On this road it was carried over the Moosic Mountains to Honesdale the head of the canal, where it was loaded on boats, which delivered it to the railroad company at Lackawaxen. From there it was carried on the canal to Port Jervis. / When 1,500 tons has been thus delivered the rails were laid from Otisville to Port Jervis. Then the difficulties of running the road into Pennsylvania arose. The road was originally intended to cross the Delaware at the village of Matamoras, nearly opposite Port Jervis, but the route was impracticable, and it was decided to change the crossing point to Sawmill Rift, three miles further up the river. Injunctions were served on the company forbidding this change of route, until it had agreed to construct a bridge across the river at Matamoras. The delay attending these proceedings threatened to be fatal to the completion of the road to Binghamton within the stipulated time. [Unless rails were laid and the Erie had the road in working order between the Hudson and Binghamton by January 1, 1849, the Erie would forfeit all its rights, franchises, and titles to the state.] Accordingly a change was made in the terms of the contract with the iron company. Instead of having the balance of the iron delivered at Lackawaxen, the railroad company had it distributed at different points along the Delaware Division. The iron was hauled on wagons over the heavy mountain roads of Northern Pennsylvania to Narrowsburg, Cochection, Equinunk, Stockport, Deposit, and Lanesboro'. Over 400 mules and horses were employed in the carting. From these points the rails were simultaneously laid, resulting in the completion of the track, according to agreement with

the state, five days before the date fixed upon. / The celebration of the event in Binghamton on the 28th of December, 1848, was one of the greatest demonstrations ever witnessed in this country. The contract was a profitable one to the new iron company, notwithstanding the expense and labor connected with its fulfillment, and it had laid the foundation for the present great city of Scranton, and resulted in taking into the Lackawanna Valley a capital of \$150,000.000. The present gigantic corporation, the Lackawanna Coal and Iron Company, is the direct outcome of that early venture of the men whose great business enterprise saved the New York and Erie Railroad from certain bankruptcy.—*N.Y. Times*.

The Delaware and Hudson Canal Company, remarkably and ironically, help to save the Erie Railroad. Without the D&H, the Erie Railroad, it seems very safe to conclude, would not have been able to get 1,500 tons of rails to Lackawaxen in time to fulfill its agreement with the state of New York.

The real heroes in this D&H/Erie project were the horses and mules that were working at the time for the D&H and the Erie:

--without sixty teams of horses and mules, the machinery for the iron mills in Harrison (later known as Scranton) would not have been delivered to Harrison in time for the Scrantons to fulfill their contract with the Erie for the production of iron rails for their new rail line;

--without teams of horses, 1,500 tons of the rails produced by the Scrantons could not have been delivered to the D&H at the foot of Plane B in Archbald for shipment to Lackawaxen;

and

--without 400 mules and horses, 8,500 tons of iron rails could not have been hauled on wagons over the heavy mountain roads of Northern Pennsylvania to Narrowsburg, Cochection, Equinunk, Stockport, Deposit, and Lanesboro for installation in the Erie's new line in time to meet its deadline with New York State.

When the Gravity Railroad was revised in 1845, horses, in many places, were replaced with machinery and water power. They were replaced because it was determined that they were too expensive and too slow in the performance of the work required.

In Hollister's unpublished manuscript, we read the following general description of the revisions effected in 1845:

"The demand for coal was steadily increasing. In 1829, 7000 tons of Lackawanna anthracite was borne from Carbondale; in 1841, 192,207 tons. This [i.e., the increasing demand] being beyond the ordinary working capacity of both the Canal and the Railroad, the Board of Managers in September 1842 adopted a plan to enlarge the Canal and change the road somewhat. The mechanical skill of Engineer Archbald was called into requisition to remedy the latter. Instead of a single track so arranged that cars could pass each other at regular a single track so arranged that

cars could pass each other at regular points, a light and a loaded track independent of each other was constructed. The location as well as the entire arrangement of the road was changed. Machinery and water power took the place of horses, which were found to be too expensive and slow. Locomotive steam engines were proposed, but this kind of power required a kind of road that would involve a large outlay of capital to make it safe and sufficient through such a country." (emphasis added, unpublished typescript, 1880, of Hollister's history of the D&H, pp. 60-61)

James Archbald's innovations in the 1840s did away with the use of some horses on the planes, and made the rail line for efficient. Those innovations are described by Hollister as follows:

"In 1836-7 he [James Archbald] constructed new planes at Carbondale with the aptness and skill that gave him credit as an engineer and greatly facilitated the movement of coal cars. The road between the planes was originally built level, requiring horses to pull the cars back and forward between the head and foot. By devising and adopting the plan of inclination for the cars to run by their own gravitation he both cheapened and quickened transportation. / Leading an up and down railroad over a mountain a thousand feet higher than the coal beds furnishing tonnage, with ascending and descending grades, was a stupendous undertaking in the infancy of railroad engineering. The present gravity road [the Hollister book is dated 1880] from Olyphant to Honesdale, emerging from the original of 1826 as engineered at that time the greater portion of the way by J. B. Jervis, was his earliest if not his highest achievement over the Pennsylvania Highlands. The fact is significant that the same general features instituted by engineer Archibald along this road in 1837 and in 1842-4 remain to-day unchallenged and unchanged. No man familiar with the history withholds the credit of its successful execution to James Archibald. Fruitful in expedients he was compelled to adopt, he promptly put in execution many features of his own creation which others deemed impossible. A man of few words, open, honest and sincere, he fraternized so readily with the workingmen under his superintendence that the man in and out of authority seemed as one, and yet everywhere and at all times he was esteemed for the accuracy of his judgment and the vigor of his intellect, and for his friendship for the industrious workingman. He was the foe to laziness. In the darkest days of the Company when its stock could have been purchased for half its original cost and labor, depressed and abundant, met with but reluctant reward, he recognized the interests of honest industry without sacrificing those of the Company. He clearly discovered that the true policy of the Company was not to seek sudden wealth but to encourage industry by giving it occupation and support." (*Hollister*, unpublished typescript, p. 60)

The revisions effected in 1845, and the impact of those revisions on the use of animal power on the Gravity line, are described by Whiting as follows:

"In 1842-45, under the direction of James Archbald, who succeeded Mr. Jervis as chief engineer, the entire location of the road from Carbondale to the summit, with the exception of plane Old No. 1, was changed. The number of planes remained the same, as well as the former summit and

summit level. The original road was then followed to the head of Old No. 8; but it and the remainder of the old track to Honesdale were abandoned, and the present loaded track was built between these points, on a descending grade of forty-four feet to the mile, thus utilizing the fall of Old No. 8, and making one continuous 'level' from the foot of Old No. 7 to Honesdale, a distance of ten miles. / The present empty or 'light' track, with a few deviations, was also built from Honesdale to Waymart, that is, the foot of Old No. 7. This necessitated the building of several new planes, those now known as Nos. 13, 14, 15 and 16, but it gave a separate road for each class of cars and so facilitated the handling of them. [This permitted horses to be dispensed with east of Waymart.] Water was used as the motive power on the new planes when practicable, that is, on Nos. 14, 15 and 16 [used on No. 14 until 1868], the wheels being at the foot. During the same time, the road was extended southwest to Archbald." (*Cassier* article by Whiting)

The new 10-mile level from Waymart to Honesdale is described in *COP* (pp. 135-36) as follows:

"From the foot of plane No. 7 to Honesdale, a distance of ten miles, very important additions and improvements were made. The road here, as originally built, was a single-track structure with turnouts, divided into two sections. The first, from plane No. 7 to plane No. 8, six miles in length, had a descending grade for the loaded cars of forty-four feet per mile, enough to enable the force of gravity to move the cars the entire distance; return cars being drawn back by horses, each horse drawing four cars. At No. 8 was another descending plane from the foot of which to Honesdale, a distance of four miles, there was a descending grade in favor of loads of twenty-six feet to the mile. On this section horses were required in both direction, each horse drawing five cars. It was impracticable, with this construction, to handle over these sections an annual traffic exceeding two hundred thousand tons. Materially to increase their capacity required double-tracking and Mr. Archbald undertook and executed this improvement. / Upon the same sections he made changes in motive power so ingenious as to demand examination. Commencing at the foot of No. 7 he utilized six miles, as originally constructed, extending to No. 8. From that point the track was relaid on the same grade, forty-four feet to the mile, all the way to Honesdale, thereby establishing a uniform descent over the entire ten miles on which the loaded cars would move by the force of gravity alone." *COP*, p. 135-36

Mathews (p. 243) describes these 1845 revisions to the roadbed as follows:

"Instead of a single track, with turnouts, by which the cars could pass at certain points, a 'loaded' and a 'light,' or return track, entirely independent of each other, were constructed, the location, as well as the entire arrangement of the road, was changed and water-power and machinery took the place of horses which were found too slow and expensive. . . These improvements were begun in 1842 and for the most part completed in 1844, though minor ones have been made since, altogether increasing the carrying capacity of the road over thirty-fold."

The improvements made between 1842 and 1845 cost \$328,890.46. Simultaneously with the remodeling of the road, the canal was deepened one foot, so that boats of forty or fifty tons could as readily pass through it as twenty-five-ton boats could in the original channel.

An interesting summary description of the 1845 configuration of the D&H Gravity Railroad and Canal was published in the September 6, 1848 issue of *The Somerset Whig*. Postulated in this description, in which there are some factual errors, is, nevertheless, the remarkable implied image of a constantly moving conveyor belt (“planes... so arranged as to keep up the operations constantly and without confusion.”) between Carbondale and New York City, a conveyor belt upon which are placed, every 6 to 8 minutes, 12 tons of anthracite coal (“in every 6 or 8 minutes, 12 tons of coal leave Carbondale for New York”).

Here is that description: “There are 7 or 8 planes operated by steam power, 4 full cars drawn up and 4 empty cars let down each time, and all so arranged as to keep up the operation constantly and without confusion. Horses are used to draw the cars from the head of one plane to the foot of the next, an average distance of 20 or 30 rods. The cars carry 3 tons each. They pass 4 over the plane each trip, which is done in about 6 minutes—therefore in every 6 or 8 minutes, 12 tons of coal leave Carbondale for New York. [emphasis added] The whole operation is very interesting and no one can fail to be highly gratified, interested and well paid, for a visit to Carbondale and Honesdale. / I am informed that at the present time, this Co. employs in all, (including boatmen on the canal) over 5000 men and boys, over 7000 horses, and 850 canal boats. In 1829, they forwarded 7000 tons of coal to New York—in 1847, they forwarded 388,283 tons, besides transporting a large amount of produce and merchandise. In 1848, they expect to reach 500,000 tons. . .”

The D&H Gravity Railroad and Canal: A "Conveyor Belt" from Carbondale to New York City." It's a very interesting image/idea/reality, and it predates Henry Ford and his Detroit automotive production lines (where the workers are stationary and the work to be done comes to them at their work stations, as it did from one end of the D&H Gravity Railroad and Canal to the other.)

A technological innovation instituted by James Archbald in the new roadbed (1845) was the grading of the levels West to East so that the loaded cars moved from the head of one plane to the foot of the next by gravity, generally West to East. This meant, of course that the loaded cars did not have to be pulled across the loaded levels by horses, a technological innovation that resulted in a big savings in dollars.

On this point, we read the following in *Clark*:

“While Mr. Archbald was in charge of the Delaware & Hudson Railroad at Carbondale he conceived the plan of raising the road at the head of each plane, and lowering at the foot of the next, and in this way making a slight decline from the head of one plane to the foot of the next.

As the road was before that constructed it was perfectly level between the planes and the cars were drawn back and forward from one to the other by horses. Mr. Archbald's plan was to make avail of the force of gravity by a slight inclination, so that the cars would run of themselves after being drawn up the planes by the stationary engines. He laid his proposition before the managers of the company, and with difficulty succeeded in getting permission to try it between planes Nos. 4 and 5. But so successful was this change when tried, that it was not only at once adopted along the whole line, but it was decided by Mr. Wurts, the President, not to mention the matter in his annual report, that the company might have full enjoyment and monopoly of the invention. This simple plan has been in use by the company ever since, and in 1847, when Mr. Archbald took charge of the construction of the Pennsylvania Coal Company's road, he laid it out in the same way. . . . " (J. A. Clark, *The Wyoming Valley, Upper Waters of the Susquehanna, and the Lackawanna Coal-Region, including Views of the Natural Scenery of Northern Pennsylvania, from the Indian Occupancy to the Year 1875*. Photographically Illustrated, 161; Chapter XXX, pp. 158-161, of the Clark book is titled JAMES ARCHBALD.)

The light cars, however, were still pulled back up the light levels (which were graded West to East) by horses, as they were in the 1829 configuration. Given the fact that the loaded level and the light level on each of the planes in 1845 were not only relatively long but also contiguous, it would have been virtually impossible, especially on the top of the Moosic Mountain, to establish successfully the two tracks on the same roadbed/alignment if they had not been graded in the same direction. The stability/soundness of each level would have been constantly weakened/eroded/compromised by the other. When the 1859 roadbed was put in place, the levels on Planes Nos. 1-6 were shorter than they were in 1845 (which made dual grading on the levels on those planes possible), and the levels on Planes Nos. 7 and 8 were distanced, the one from the other, an innovation which opened the door to the amazing roadbed/structural modifications made manifest in the 1868 configuration of the Gravity Railroad.

On the question of moving coal cars, full and empty, by using gravity as a source of power [on the loaded track only] through a double-tracked system, Dr. Steers says (p. 162):

"Archbald began to use gravity as a source of power with the construction and operation of the railroad between 1836 and 1847. At this time he developed the gravity system on the 'levels' between the planes [on the loaded track only*]. Two tracks were required, a 'loaded' track for cars carrying coal from the mines to . . . Honesdale for . . . shipment via the canal. The second track, the 'light' track was used for returning the empty cars to the mines. The two track system installed by Archbald relieved the bottle neck resulting from single track levels [in the 1829 configuration]. . . The effectiveness of his changes are reflected by the five-fold increase in coal tonnage hauled by the new road. / Archbald discovered that a gradient of 6" in 60' (0.833%) on the loaded track and 6" in 54' (0.926%) on the light track would provide sufficient 'power' to move the cars on the respective levels."

*A gravity system for moving light cars on the levels on Planes 7 and 8 was instituted in the 1859 revisions, as we demonstrated in Volume III in this series. As such, as early as 1856, the use of horses on the levels on the Gravity Railroad was discontinued. This is confirmed by the following notice that was published in the August 14, 1856 issue of the *Carbondale Transcript and Lackawanna Journal* (p. 2):

“The Delaware and Hudson Canal Company have located their new Railroad [the 1859 configuration], and are engaged in clearing the track, preparatory to grading. To reach the summit of the mountain they design to have eight engines, where they now have but five, and dispense altogether with the use of horses on the track. This will enable them to transport an increased amount of coal over the road, which we learn, they are preparing to do. Success, say we, to every enterprise calculated to add to the business of this part of the valley.” (*Carbondale Transcript and Lackawanna Journal*, August 14, 1856, p. 2)

In order to dispense with the use of horses on the eight planes from Carbondale to Farview in 1859, the light track levels on Planes 1-6 were built on a descending grade, East-West (before 1859, the light track levels were all graded West-East), and the light track levels on Planes Nos. 7 and 8 were detached from the loaded track to their own roadbed.

“The final location of the loaded track from Carbondale to Farview was made in 1856-57 when an entire new line was built and eight planes used in place of the former five, thus shortening the intervening levels. To entirely dispense with horses the light track between the planes was built on a descending grade [emphasis added], two short ‘return’ planes being built near the head of Numbers Seven and Eight, to bring the empty cars to the top of these planes. Operations of the planes continued the same . . .” (“Our Own Gravity Road,” *The Delaware and Hudson Company Bulletin*, July 15, 1925, pp. 6, 9-11)

Let's take a closer look at the 1859 configuration. In the 1859 configuration, there were eight double-tracked planes between Carbondale and Farview, with both tracks, except on Planes Nos. 7 and 8, side by side on the same roadbed. The loaded levels on Planes Nos. 1-6, as in 1845, were graded West-East (cars moved by gravity, no horses required). In 1859, the light levels on those same six planes were now graded East-West (cars moved by gravity, no horses required, which was not the case in the 1845 configuration when the light cars had to be pulled West on the light levels which were then graded West-East), the loaded and light levels 1859 on those six planes in 1859 both running on the same roadbed, side by side. Additionally, in 1859, a highly important innovation was made on Planes Nos. 7 and 8: the light levels were detached from the loaded levels, with the loaded and light levels on each of those planes running on its own roadbed, the loaded levels graded West-East (no horses required) and the detached light levels graded so as to make maximum gravity movement to the west possible. When gravity movement

to the West was no longer possible on these two levels, "return planes" were installed in these two light levels (No. 8 and No. 7) to get the empty cars back to the head of Plane No. 8 and then Plane No. 7 for movement down the mountain, through Planes Nos. 6-1, to the Lackawanna Valley. This important innovation on Planes Nos. 8 and 7 in 1859 led to the creation in 1868 of a completely detached light track (Level 20) from Farview to the Lackawanna Valley.

Even though working animals were no longer used on the Gravity planes after 1859, they still fulfilled an important function at the collieries in the Lackawanna and Wyoming valleys. In the account of the White Oak colliery/Birdseye breaker in Archbald in 1880 (p. 463), we learn that 38 mules were used there:

"The White Oak Colliery—This drift was opened by the Delaware and Hudson Canal Company in 1845, and operated by them until 1859, when it was sold to judge Birdseye, of New York city, and operated under lease successively by H. Jenkins, William Nichols, Robert Salton and Patrick Kearney. After the building of the breaker, in 1860, work was suspended six months, and in 1861 Hosie & Jadwin leased the property, working until 1863, when John Jermyn became its operator for two years, succeeded by the Boston and Lackawanna Coal Company, who purchased the land of Birdseye and worked the mine until 1870. Then, on their bankruptcy, the Delaware and Hudson again came into possession and have operated it since. The breaker has a capacity of 650 tons daily. The number of men and boys employed is 230. One breaker engine supplies the power. The drifts are worked to a distance of one and one-half miles from the entrance, which is about 800 feet from the breaker. Thirty-eight mules are in use. In 1880 a shaft was being sunk to a depth of 80 feet, at a distance of one-third mile south of the breaker. The outside foreman is Thomas Law; inside foreman, Hugh Jones; and D. J. Gilmartin and Thomas Hunter are weighmasters. The average daily production is about equal to the capacity of the breaker. John Hosie was the first foreman, succeeded by James Liddle, then by William Law, and in 1854 by Edward Jones, who had charge of the works until 1858. The vein of coal worked is the Archbald, with an average depth of ten feet " (1880, p. 463)

Ed Casey, on May 13, 2013, spoke of the horses that were used at the Eaton Mines in Archbald as follows:

"The Eaton mines were established on the West mountain above Main Street in the summer of 1856. To get the coal to the Gravity cars [on the other side of the Lackawanna River before Planes Nos. 24 and 25 were built] an inclined plane, running parallel to the mine opening, was constructed on the hillside. A trestle was built to carry the cars, pulled by horses, over the river to connect with Planes Nos. 1 and 2."

Horses and Mules after 1859:

1. Horses on the Railroad:

As we saw in the unit on the 1859 configuration, the foot of Plane No. 23 was the end of the line in the Gravity system at this time. In order to move Gravity coal and passenger cars from that point to the South, a short Gravity-gauge line had to be constructed from the foot of Plane No. 23 to the South, with a bridge across the Lackawanna River. Once across the Lackawanna River, at Valley Junction, there were two options: (1) the passenger cars were moved onto the newly-constructed (completed in February 1860) D&H 4-mile steam locomotive rail line—standard gauge and gravity gauge—for the trip from Valley Junction and Providence (the complete steam line between Providence and Carbondale was completed in 1871); (2) the coal cars were moved onto a separate Gravity-gauge track, to the West of the steam line, to the Von Storch and Richmond breakers.

The motive power used to move these passenger cars from Olyphant to Providence and return was, initially, two horses, driven tandem, soon to be replaced by a Gravity-gauge steam locomotive, the Major Sykes. In an undated clipping (probably from the 1890's from the *Carbondale Leader*), titled "The Delaware & Hudson Railroad," we read:

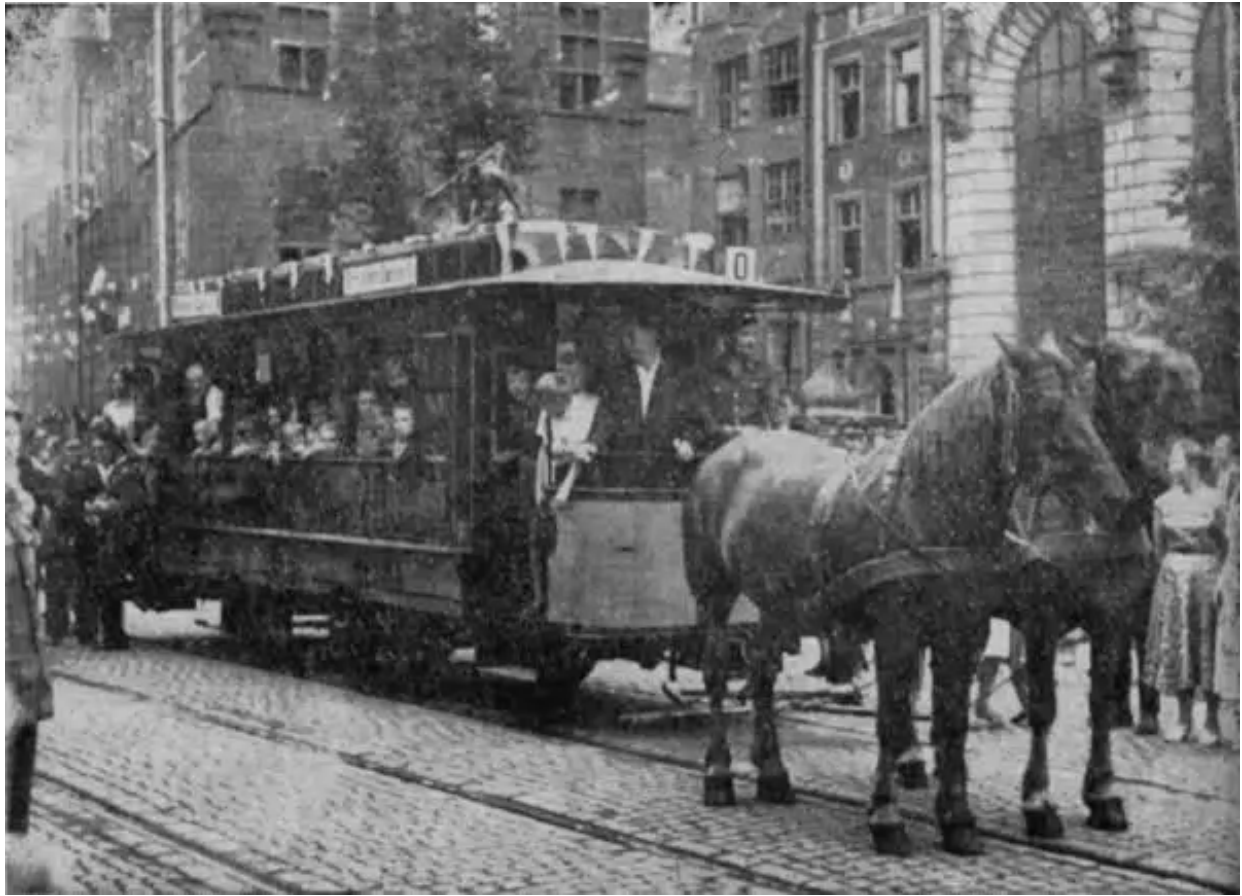
"THE DELAWARE & HUDSON RAILROAD, / It Employs 1,200 Men in Carbondale and Disburses over \$300,000 Annually. / The locomotive railroad, of the Delaware & Hudson Canal company, might be said to have had its beginning in February, 1860, when passenger cars were hauled between Olyphant—the terminus of the Gravity road—and Providence, a distance of a little more than three miles. The motive power at first consisted of two horses, driven tandem [emphasis added]. After a month or so, the horses were replaced by a locomotive, and the "Major Sykes," the first locomotive built for the Delaware & Hudson company's use on this side of the mountain, performed the work. . .

The use of horses to pull the cars from the foot of Plane No. 23 to Providence is also underlined in an article titled "**TRAVEL IN THE EARLY DAYS.** / How the Means of Passenger Transportation Has Changed in the Last Forty Years—The 'String of Beans'," that was published in the *Carbondale Leader* of February 5, 1887, p. 4:

"In the Scranton 'Truth' of Saturday, Dr. H. H. Hollister, of Providence, one of the oldest men in this valley and its accredited historian, gives an interesting account of the means of travel in the days of '45 and thereabouts. From it we [the *Carbondale Leader*] take the following: / . . . In the original charter of the Delaware and Hudson Canal Company passenger traffic was neither forbidden nor implied. The movement of coal toward the seaboard with miscellaneous returning freight was its only aim. The old red stage coach [pulled by horses], driven for a quarter of a

century by the Kenners, and making its way along the valley and over the hills from Scranton to Carbondale less than thirty years ago with sun dial correctness, vanished in 1860. In the summer of that year, Thomas Dickson, then Superintendent of the Valley Gravity Road, seeing the increasing travel between these islands cities conceived the idea of putting a passenger train upon it. He had three cars built, narrow and small, hired a conductor named Decker to run them a few times over the road in order to ascertain their speed and make a time table. This train in derision, was called the 'string of beans,' with a seat upon each side of the car, too diminutive for a tall passenger to stand erect. It first ran to Peckville, from whence passengers proceeded by stage. When the bridge across the Lackawanna, at Peckville, was completed, the cars ran to Olyphant and after a few weeks delay they moved to the lower end of the village of Price in the meadow on the farm of William Vaughan. The cars were drawn by a horse from Plane G. Here the cars were met by a stage [an omnibus] and a bus [a horsecar] [emphasis added]. When the track was laid to Capouse, in Providence, two rival buses were on hand and they carried passengers to and from Scranton for twenty-five cents. When Bayard Taylor lectured in Scranton in 1860 he took this route to Carbondale. After the erection of the bridge at Providence, the East Market road was for years the western terminus of the road. April 17, 1860, the following railroad notice appeared: / 'The Carbondale and Providence passenger trains, until further notice, will run as follows: Leave Carbondale at 6:00 and 8:30 a.m. 2:00 p.m. returning leave Providence at 8:15 a.m. 11 a.m. 4:40 p.m. Omnibuses will be waiting for the conveyance of passengers to and from the trains upon the Del., Lack. and Western and Bloomsburg Railroads. / C. P. WURTS / Supt. D. & H. C. Co.' / Today [1887] six first class passenger trains run daily between Carbondale and Scranton, carrying at least five hundred passengers daily, while the old stage of forty years ago carried three or four passengers every other day. What a change!" (**TRAVEL IN THE EARLY DAYS.** / How the Means of Passenger Transportation Has Changed in the Last Forty Years—The 'String of Beans', *Carbondale Leader* of February 5, 1887, p. 4)

From 1859 up to 1863, Providence was the end of the D&H rail line. To get to Scranton, you took from Providence either an omnibus, initially, or, later on, a horsecar, or bus, which is a horse-drawn transit vehicle which runs on rails, like the one shown below. The minimal friction of steel wheels on steel rails (or iron on iron) made for a smoother ride than in an omnibus or urban coach, which had to travel on unpaved or on cobble stone streets. A horsecar on rails allowed the horse to pull a larger load and to make better time than he could with a road vehicle.



Photo, found on the Internet, of a horsecar.

In 1863, the D&H steam line down from Valley Junction was extended from Providence to Vine Street. This we know from the article given below in the form of an undated clipping (probably from the 1890's from the *Carbondale Leader*), titled "The Delaware & Hudson Railroad," in the holdings of the Carbondale Historical Society. Therein, we read:

"THE DELAWARE & HUDSON RAILROAD, / It Employs 1,200 Men in Carbondale and Disburses over \$300,000 Annually. / The locomotive railroad, of the Delaware & Hudson Canal company, might be said to have had its beginning in February, 1860, when passenger cars were hauled between Olyphant—the terminus of the Gravity road—and Providence, a distance of a little more than three miles. The motive power at first consisted of two horses, driven tandem. After a month or so, the horses were replaced by a locomotive, and the "Major Sykes," the first locomotive built for the Delaware & Hudson company's use on this side of the mountain. . . All

of the engines built [by the Dickson Manufacturing company] prior to the extension of the [D&H] line to Vine street, Scranton, in 1863, were transported from the Dickson works to Providence on heavy wagons, drawn by horses and mules."

From that newspaper article, we learn of yet another way that working horses and mules were of service to the D&H in the period 1860-1863: they were used to pull from Vine Street to Providence the heavy wagons in which were transported steam locomotives built at the Dickson Manufacturing Company on Vine Street to D&H rails at Providence.

With the extension of the D&H tracks to Vine Street (a Charles Pemberton Wurts initiative) passengers from "up the Valley" were now able to travel into downtown Scranton to a point, Vine Street, about one half mile by the side walk, from the DL&W railroad depot on Lackawanna Avenue. In the *Carbondale Advance* of November 14, 1863, we read:

"The passenger trains on the Del. & Hud. Canal Co.'s Railroad now run thro' to the Scranton Railroad, in the rear of the Dickson Manufacturing Co.'s Machine Shops [Vine Street]. This is at the foot of Franklin Avenue, and about one half mile by the side walk, from the railroad depot. / The Passenger Cars are a great convenience and benefit to our town, and the fact we know is generally appreciated.--Very few of our people, however, know how fully we are indebted for this blessing to C. P. WURTS, Esq., the Railroad Superintendent." (*Carbondale Advance*, November 14, 1863, p. 2.)

Note about mules and the Pennsylvania Coal Company Gravity Railroad:

At the seminar/presentation in Council Chambers, Carbondale City Hall, on January 25, 2007, by the author on *Working Horses and Mules on the D&H*, Tom Klopfer offered the following information on the use of mules on the Pennsylvania Coal Company's Gravity Railroad:

"Mules were used by the Pennsylvania Coal Company to move their Gravity Railroad passenger cars at the passenger transfer station at Dunmore in the summer of 1856. There is a photograph of such a transfer on page 54 of a book in the collection of the Lackawanna Historical Society. The caption on the photograph reads as follows: "The Pennsylvania Coal Company's passenger transfer station at Dunmore, n. d. This is probably what New York Governor Myron Clark saw when his party transferred to carriages for the ride to Scranton's iron works. Courtesy of the Lackawanna Historical Society."

Here are nine Gravity Railroad timetables from the period 1860-1868, all of which contain interesting data on the passenger options open to travelers from Carbondale to Providence/Scranton, and return. Working horses played a key role in the successful operation of these D&H passenger initiatives.

D&H inclined planes and levels from Carbondale to Olyphant, steam locomotives south of Olyphant:

The D&H trains used for the passenger service indicated in these nine timetables all traveled from Carbondale to Olyphant via the Gravity Railroad's inclined planes and levels to the foot of Plane No. 23 in Olyphant.

To travel south of the foot of Plane No. 23, these passenger cars were then pulled by Gravity-gauge steam locomotives on essentially flat land.

Beginning in 1870, Gravity passenger trains in the Lackawanna Valley traveled on the Valley Road and not via the Gravity inclined planes and levels.

RAIL-ROAD NOTICE.

THE CARBONDALE & PROVIDENCE PASSENGER TRAINS.

UNTIL FURTHER NOTICE, WILL BE RUN AS FOLLOWS:—

Leave CARBONDALE, at..... 6 00 A. M.
 " " "..... 8 30 "
 " " "..... 2 00 P. M.

RETURNING.

Leave PROVIDENCE at..... 8 15 A. M.
 " " 11 35 A. M.
 " " 4 40 P. M.

OMNIBUSES

Will be in waiting for the conveyance of Passengers to and from the Trains upon the Del. Lack. & Western and Lackawanna & Bloomsburg Railroads.

C. P. WURTS,
Supt. D. & H. C. Co.

OFFICE OF THE DEL. & HUD. C. Co.,
Carbondale, April 20, 1860.

An omnibus is a large, enclosed and sprung horse-drawn vehicle used for passenger transport.

The omnibuses that met these D&H passenger trains were not D&H omnibuses, and the horses that pulled them were not D&H horses, but these working horses were an important component of a transportation system that was organized and made possible by the D&H.

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CHANGE OF TIME.



THE CARBONDALE & PROVIDENCE PASSENGER TRAINS.

ON AND AFTER MONDAY, JULY 16th, Trains will be run as follows:—

Leave CARBONDALE, at.....7 30 A. M.
 " " "2 00 P. M.

RETURNING,

Leave PROVIDENCE at.....10 05 A. M.
 " " "5 00 P. M.

O m n i b u s e s

Will be in waiting for the conveyance of Passengers between Providence and Scranton, at which latter point connections will be made with the trains upon the D. L. & W. and L. & B. Railroads for New York, Wilkesbarre and Great Bend.

→An OMNIBUS will leave the Harrison House in Carbondale at 7.15 A. M. and at 1.45 P. M., for the Cars, and will be in waiting upon the arrival of the trains to convey passengers to any part of the City.

C. P. WURTS,

Supt. D. & H. C. Co.

OFFICE OF THE DEL. & HUD. C. Co.,
 Carbondale, July 21, 1860.

First-class passenger amenities for D&H travelers in Carbondale, as early as 1860

Three months later, July 1860, two trains daily, Carbondale to Providence and return. Omnibuses available to meet the trains both in Carbondale and Providence; omnibuses available for the use of arriving and departing passengers in Carbondale: "An OMNIBUS will leave the Harrison House in Carbondale at 7:15 A.M. and at 1:45 P.M., for the Cars, and will be in waiting upon the arrival of the trains to convey passengers to any part of the City." Very nice amenities available to passengers. C. P. Wurts, Superintendent.

Carbondale Advance, February 23, 1861, p. 3

Timetable effective January 9, 1861:

D. & H. C. Co.'s R. R.

Carbondale and Providence Passenger Trains.

OFFICE OF THE DEL. & HUDSON CANAL Co.,
Carbondale, Pa., January 9th, 1861.

UNTIL FURTHER NOTICE, the Trains on the
Del. & Hud. Rail Road will run as follows :

Leave Carbondale for Providence and Scranton at.....	7.45 A. M.
And at.....	2.30 P. M.
Leave Scranton for Carbondale at....	9.47 A. M.
And at	4.26 P. M.

C. P. WURTS, Sup^v

Two trains a day, each way: one in the morning and one in the afternoon.



Horse-drawn omnibus in London, 1902

Six months later. Two trains, each way, one in the morning and one in the afternoon. Omnibuses available both at Providence and Carbondale. C. P. Wurts, Superintendent.

Carbondale Advance, March 26, 1864, p. 13

Timetable effective January 11, 1864:

The "Dickson" stop on the west side of the Lackawanna River was formerly known as "Valley Junction."

DEL. & HUD. R. R. TIME TABLE. **TAKES EFFECT JANUARY 11, 1864.**

TRAINS MOVING SOUTH.			TRAINS MOVING NORTH.		
A. M.	A. M.	P. M.		A. M.	P. M.
FRT.	PASS.	PASS.		PASS.	FRT.
7 30	8 25	2 20	CARBONDALE,	11 40	2 30
7 55	8 35	2 40	Archbald,	11 10	2 00
			Peckville,		
9 15	9 15	8 10	Olyphant,	10 46	1 35
9 22	9 22	8 15	Dickson,	10 41	1 26
9 30	9 30	8 21	Providence,	10 35	1 20
9 36	9 36	8 26	SCRANTON,	10 30	1 00
			R. MANVILLE, Supt.		
			Carbondale, Jan. 11. 1864.		

The Gravity Railroad passed through Peckville but there was not a Gravity passenger depot there in 1864.

"Scranton" here means the Vine Street (station there not yet built).

The "Dickson" stop on the west side of the Lackawanna River was formerly known as "Valley Junction."

The last line of the above timetable contains a typo. It should read: "Carbondale, Jan. 11, 1864."

Two passenger trains and one freight train, each way, Carbondale to Providence. A little over an hour each way. Not bad time.

From Carbondale to Olyphant, via the D&H inclined planes and levels; from Olyphant to Scranton on essentially flat land with Gravity cars pulled on Gravity tracks by Gravity-gauge steam locomotives. Scranton, here, means Vine Street, to which the D&H line was extended (from Providence) in 1863.

Scranton
here means
Vine Street

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Carbondale Advance, June 3, 1865:

Timetable effective May 29, 1865:

DEL. & HUD. R. R. TIME TABLE.									
TAKES EFFECT MAY 29, 1865.									
TRAINS MOVING SOUTH.					TRAINS MOVING NORTH.				
P. M.	A. M.	P. M.			A. M.	A. M.	P. M.		
FRT.	PASS.	PASS.			PASS.	FRT.	PASS.		
3 00	8 15	2 30	CARBONDALE,		11 40	9 45	5 50		
3 25	8 35	2 50	Archbald,		11 16	9 18	5 25		
			Peckville,						
4 55	9 05	3 20	Olyphant,		10 46	8 50	5 01		
5 02	9 12	3 25	Dickson,		10 41	8 26	4 56		
5 10	9 20	3 31	Providence,		10 35	8 20	4 50		
5 20	9 26	3 36	SCRANTON,		10 30	8 00	4 40		
					R. MANVILLE, Supt.				
Carbondale, May 27. 1865.									

Scranton, here,
means the Vine
Street

1865: Two passenger trains and one freight train, daily, Carbondale to Scranton (Vine Street)

Timetable effective November 11, 1867:

"Junction" here means Green Ridge. D&H passengers traveling south could stay on the D&H cars at Green Ridge and travel to Vine Street, or get off the D&H cars at Green Ridge and onto a Scranton & Providence Passenger Railway horsecar at Green Ridge and travel directly to the DL&W depot on Lackawanna Avenue

DELAWARE AND HUDSON RAIL-ROAD TIME TABLE.—On and after Nov. 11th, 1867, trains will run as follows :			
MOVING SOUTHWARD.			
	Pass'r	Pass'r.	Accom'n.
	A. M.	P. M.	P. M.
Leave—Carbondale	8.00	2.20	3.00
Archbald	8.20	2.40	3.25
Peckville			
Olyphant	8.45	3.05	3.50
Dickson	8.57	3.15	4.00
Providence	9.05	3.20	4.05
Junction	9.10	3.25	4.10
Arrive Scranton	9.15	3.30	4.15
MOVING NORTHWARD.			
	Accom'n.	Pass'r.	Pass'r
	A. M.	A. M.	P. M.
Leave—Scranton	8.00	10.10	4.40
Junction	8.10	10.15	4.45
Providence	8.15	10.20	4.50
Dickson	8.25	10.25	4.55
Olyphant	8.40	10.30	5.05
Peckville			
Archbald	9.00	11.00	5.35
Arrive Carbondale	9.30	11.30	6.00
R. MANVILLE, Sup't.			
PASSENGERS ON THE DELAWARE & HUDSON R. R.			
TO AND FROM SCRANTON OR PROVIDENCE.			
The Cars of the Scranton & Providence Passenger Railway,			
will always be on hand to take passengers to and from the Del. Lack. & Western Depot, with their baggage, also to and from Providence on their arrival at Green Ridge Station. Fare, 10 cents. Baggage extra.			
GEO. SANDERSON, President.			

"Scranton" here means Vine Street.

1867: Two passenger trains and an accommodation train, Carbondale to Scranton, daily. Trains will not stop in Peckville. "Scranton" here means Vine Street. "Junction" here means Green Ridge (Roundhouse at Green Ridge established in 1867). Horsecars ("Scranton & Providence Passenger Railway," George Sanderson, president) available at Green Ridge for travel to Providence or DL&W station. R. Manville, D&H Superintendent.

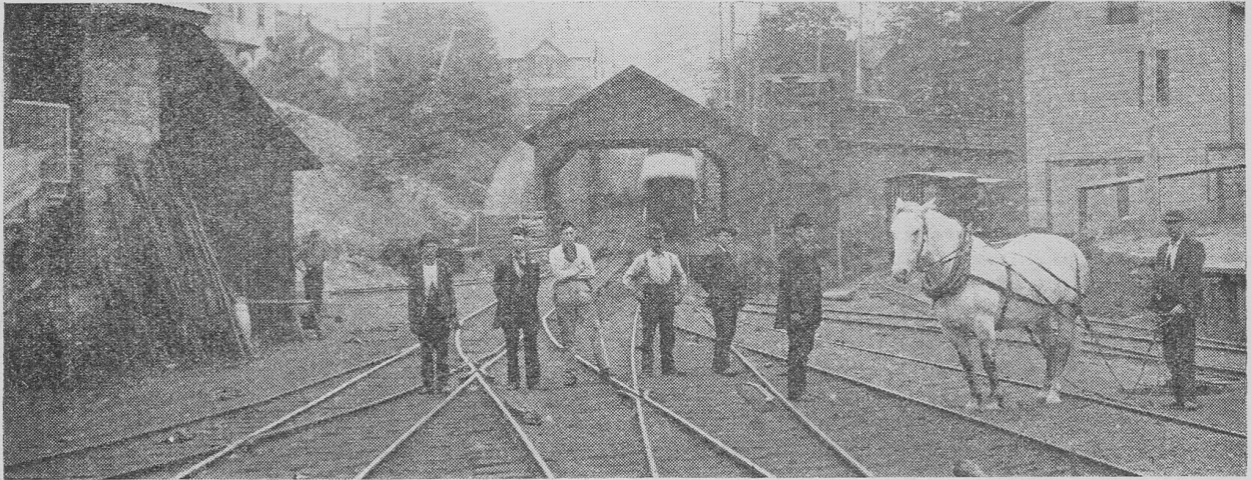
Timetable effective May 1, 1868:

DELAWARE AND HUDSON R. R.				
TIME TABLE.				
Takes Effect May 11th, 1868.				
TRAINS MOVING SOUTH.				
		Pass'r.	Pass'r.	Accom'n.
		A. M.	P. M.	P. M.
Leave	Carbondale,	6.30	1.00	2.50
	Archbald,	6.35	1.35	3.30
	Peckville,	—	—	—
	Olyphant,	7.15	1.45	4.20
	Dickson,	7.27	1.55	4.30
	Providence,	7.35	2.00	4.50
	Junction,	7.40	2.05	5.00
Arrive	Scranton,	7.45	2.10	5.10
TRAINS MOVING NORTH.				
		Accom'n.	Pass'r.	Pass'r.
		A. M.	A. M.	P. M.
Leave	Scranton,	7.10	9.00	4.00
	Junction,	7.20	9.05	4.05
	Providence,	7.30	9.10	4.10
	Dickson,	7.40	9.15	4.15
	Olyphant,	7.50	9.20	4.20
	Peckville,	—	—	—
	Archbald,	8.30	9.45	4.50
Arrive	Carbondale,	9.20	10.15	5.15
<p>The 6.30 A. M. and 1.00 P. M. Trains connect with the Delaware, Lackawanna & Western R. R. for New York and the West, and Lehigh & Susquehanna R. R. at Green Ridge, and Lackawanna & Bloomsburg R. R. at Scranton, for Wilkes-Barre and points South.</p> <p>Connecting Trains on Delaware, Lackawanna & Western R. R. wait 20 minutes, and the 4.00 P. M. Train waits for Delaware, Lackawanna & Western one hour, if the Trains on either Road are behind time.</p> <p>R. MANVILLE, Supt.</p>				

1868: Time changes on the two passenger trains and one accommodation train daily, Carbondale to Scranton. No stops at Peckville. Connections at Green Ridge for DL&W trains for New York and the West, and the Lehigh & Susquehanna Railroad; connections at Scranton for Lackawanna & Bloomsburg Railroad, for Wilkes-Barre, and points South. "Connecting Trains on Delaware, Lackawanna & Western R. R. wait 20 minutes, and the 4:00 P.M. Train waits for Delaware, Lackawanna & Western one hour, if the Trains on either road are behind time." R. Manville, D&H Superintendent.

2. Horses at the Foot of Planes

Even though horses were dispensed with on the planes by 1859, they were still used, like switcher engines, at the foot of Planes Nos. 1 and 13, among others. The photograph shown below ("Carbondale 'Switcher' [the horse] and Crew of Gravity Days"), which was taken at the foot of Plane No. 1, is published on page 68 of the March 1, 1929 issue of *The Delaware and Hudson Company Bulletin*.



Carbondale "Switcher" and Crew of Gravity Days

In 1876, valuable horse used on the dock at Honesdale broke one its hind legs:

"A valuable horse owned by the D. & H C. Co. and employed in moving cars at the dock in Honesdale, broke one of its hind legs the other day, and had to be killed." (*Carbondale Leader*, September 30, 1876, p. 3)

In the Hensel photograph given below of the yard area at the foot of Plane No. 1 in Carbondale, we see two white horses: one pulling a load of lumber, the other resting.

Working horse being used here to move cars in the yard area at the foot of Plane No.1 in Carbondale

Another working horse, at rest, in the D&H yard in Carbondale



Photo by Hensel of the D&H yard area at the foot of Plane No. 1 in Carbondale. This photograph, in the collection of the Carbondale Historical Society, was colorized by the legendary Carbondale photographer, Adon Cramer.

One of the white horses seen in the photo above of the Carbondale yard is probably the horse named *Tom*:

“The white horse ‘Tom’ who does duty at the foot of No. 1 plane is an inveterate tobacco chewer.” (*Carbondale Leader*, October 20, 1882, p.2)

The large bay horse that worked at the foot of Plane No. 1 was named *Charlie*:

“Charlie, the large bay horse belonging to the company, and doing service at No. 1 foot, fell on Tuesday, and had one of his eyes gouged out by a piece of iron rail. Charlie is laid up for repairs.” (*Carbondale Leader*, October 20, 1883, p. 2)

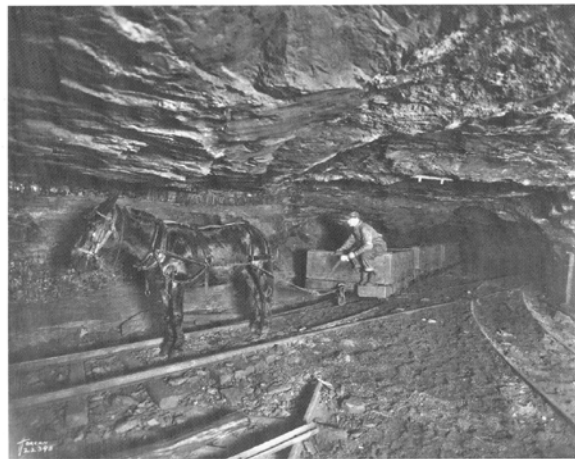
A team of horses also worked at the D&H stone quarry at No. 7:

“Isgar Haycock has been driving the company’s team at No. 7 stone quarry this week.” (*Carbondale Leader*, April 17, 1885, p. 1)

Mules Used on Underground Planes

From the biographical portrait of Frank S. Clark, with photo, in the September 1, 1936 issue of *The Delaware and Hudson Railroad Bulletin*, pp. 131-32, we learn not only that the D&H had, in some mines (Laurel Run, Wilkes-Barre Colliery, for example) an underground gravity system of planes but also that the loaded cars were hauled out of the mines by mules:

“RAN UNDERGROUND PLANE / Retired Parsons Engineer Began 58-year Service on Mine Road / The fact that the Delaware and Hudson’s first railroad, which crossed the mountains between the anthracite mines in the Lackawanna Valley and the canal at Honesdale, PA., was for the most part gravity operated, is more or less common knowledge. That an underground gravity railroad system was in use by the company in the mines at the same time is not so generally known. / **FRANK S. CLARK**, veteran of 58 years’ service with the Company, ‘ran’ an underground gravity plane in the mines at Laurel Run (Wilkes-Barre) Colliery, back in the seventies [1870s]. The gravity system was used to replace the loaded cars in mining chambers above the main tunnel with empties to be filled. When three cars had been loaded in the chamber a steel rope was run from the last car of the string, around a sheave equipped with a brake drum and lever, to three empty cars at the bottom of the underground plane. By removing the sprag which blocked the front wheel of the loaded string, the loads were started down the plane, their weight pulling up the three empties. By the hand brake lever the movement of the two ‘trains’ could be controlled until the empties were ‘spotted’ and stopped at the top of the plane, the loaded cars being hauled out of the mine by mule-power. . .” (p. 131)



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OLD MULE 28 YEARS HAULING 3 MINE CARS INSIDE
(HORGAN #22393, c. 1921)

Photo by John Horgan, Jr., circa 1921. Photo marked in white ink in lower left corner: "Horgan / 22393." Photo titled by Horgan: "Old mule 28 years hauling 3 mine cars inside." Photo reproduced here from page 56 of *Percival and Kulesa*.

From that same biographical portrait of Frank Clark, we learn many additional and very interesting details about his work career with the D&H:

“MR. CLARK, who was born at Waymart, Pa., a station of the Carbondale-Honesdale Gravity Railroad, June 14, 1862, entered the Delaware and Hudson Canal Company’s employ, in the Coal Department at Laurel Run Colliery, at the age of 11, as a ‘breaker boy’ or ‘slate picker.’ Less than a year later he was given the task of ‘oiling the breaker’—lubricating the big rollers which crushed the ‘run of mine’ coal, the cogs, cable- and belt-wheels which connected the rest of the machinery with the steam engine which drove it. . . / In the thirteen years he spent in the Coal Department he served, in addition, as ventilating door tender down in the mines; as the driver of the mules which hauled the empty and loaded mine cars in and out of the workings; and finally as a ‘runner’ on the slope leading from the mines to the surface. On the last mentioned job, it was his duty to ride the empty cars as they were lowered by cable from the outside stationary engine house to the various ‘levels’ and ‘drifts’ underground and to attach the cable to loaded cars to be hoisted up the slope to the surface. Communication between the ‘runner’ and the stationary engineer was maintained by bell-cord signals, a device long since replaced by electronically-operated signals.” (pp. 131-32)

7012

Horses and Mules in the Collieries and Mines

Horses and mules were central to the effective functioning of the mines and collieries throughout the nineteenth century and well into the twentieth century. On an average day, each mule in the mines hauled about 100 tons of coal.

George Cotton's first job at the Union Slope at Pumpkin Hollow was as a mule driver, moving the coal cars in and out of the mines:

"In 1867, the Cotton family again moved, this time to Pumpkin Hollow, later known as Mill Creek and now Hudson, Penna. Here George was employed in the Union Slope, now operated by the Hudson Coal Company as a part of the Loree Breaker's workings, as a mule driver, moving the diminutive coal cars in and out of the mines. Shortly after his arrival he was promoted to the rank of runner, a position which paid \$3.25 a day. As a runner he was in charge of the drivers. It was his responsibility to make sure that each miner had sufficient cars in his chamber at all times and also to give each miner exactly eight cars per day." [emphasis added] (Biographical portrait of George Cotton in the April 1, 1932 issue of *The Delaware and Hudson Railroad Bulletin*, pp. 99-100)

About 600 mules worked in and about the D&H mines in 1873. About two mules were killed by accidents in the mines daily:

"The Del & Hud Canal Co find employment for about 600 mules in and about their mines. They lose about 2 a day by accident." (*Wayne Citizen*, April 3, 1873)

In the August 11, 1877 report by a committee of D&H stockholders on the business, operations, history, policies, prospects and equipment of the company it was reported by the coal department that "Underground there were one hundred and forty-six miles of railroad in all, fifty-nine miles of T-rail, thirty-eight miles of strap-rail, and forty-nine miles of wooden tramway, forty horses and five hundred and twenty-six miles." (*Century of Progress*, p. 268)

When the Erie Breaker burned in November 1886, there were 51 mules stabled a few yards from the foot of the shaft. The morning after the fire, they were safely taken out through the Powderly mine. Between 300 and 400 men and boys worked in the Erie Breaker.

“Burning of the Erie Breaker. / About midnight on Tuesday, our citizens were aroused from their slumbers by the alarm of fire energetically sounded at Davies’ Head. A bright light overspread the heavens in the direction of the southerly part of the city, but the fire proved to be outside the city limits, and the light was caused by the burning of the Erie Breaker, at Glenwood, which was operated by the Hillside Coal and Iron Company. / At about half-past 11 o’clock the watchman discovered flames issuing from the tower, and within an hour every part of the immense structure was enveloped by fire. Owing to lack of water and fire apparatus, it was impossible to check the fire, and the building was burned to the ground. The fire lighted the country for miles around, and a large crowd of witnessed the havoc of the flames as they pursued their destructive course unchecked. / All the big timbers remained in position after the boards on the outside and the planks on the inside of the building had burned. At last the timbers were brought to a red-head and the framework swayed and came down making an exceedingly picturesque scene. / When the fire broke out there were thirteen men and two drivers at work in the other parts of the colliery. One of the pump runners was startled by seeing the sheave-wheel and some timbers, the latter covered with flames, come down the shaft with astounding velocity and crash upon the bottom. He gave the alarm to the miners and other employes and they all escaped by way of the air shaft. / Fifty-one mules were stabled a few yards from the foot of the shaft. They were taken out in the morning through the Powderly mine. / The loss to the company will probably exceed \$50,000. The breaker was insured, but we have been unable to learn the amount of the insurance. Between 300 and 400 men and boys were employed at the works, which had been running on full time lately. / The breaker was built in 1868, and had a capacity of 700 tons daily. It will be rebuilt as soon as possible.” (*The Journal*, November 18, 1886, p. 3)

The mule drivers in the mines were usually boys in their early teens. In *Growing Up in Coal Country* by Susan Campbell Bartoletti (pp. 34-365) we read: "These boys "traveled from one work chamber to the next, coupling the full cars together and leaving an empty car to be filled. A boy started out with one mule, then worked his way up to a six-mule team. When he was able to drive six mules, he was given a man's wages and earned the respect of all the workers and

bosses. . . / [T]he mules were harnessed one behind the other. The driver sat or stood on the front car bumper, where he used only his voice to guide the mules."

The fact that the mule drivers drove the mules without reins or lines is underlined in the well known mine song, *My Sweetheart's the Mule in the Mines*:

My sweetheart's the mule in the mines,
I drive her without reins or lines,
On the bumper I sit, / I chew and I spit,
All over my sweetheart's behind."

7013

Horses and Mules in 1877 and in 1887

D&H Horses and Mules in 1877

In a brief history of the Delaware and Hudson Canal Company that was published in the August 23, 1877 issue of the *Honesdale Citizen*, it is reported that the D&H owned 40 horses and 526 mules. That "brief history" (which appears to be a summary statement derived from a D&H annual report) contains not only the horse and mule numbers for 1877 but also a remarkable quantity of statistics about the D&H in 1877:

"The following is a brief history of the Del & Hud Canal Co.: It was organized in 1825 by the election of Philip Hone as President. In 1827 the State of New York loaned its credit to the Company for \$500,000, and in May, 1829, for \$300,000 more. The Company operates 665 miles of railroad, of which 135 ½ miles are owned by it and 529 ½ miles are leased or under contract, of the portion owned by the company, 56 miles represent the 'Gravity Railroad' consisting of a 'light' track of 30 miles and a 'loaded' track of 26 miles, and 79 ½ miles, the locomotive road. The equipment of the canal at the close of the last fiscal year consisted of 915 canal boats, 66 transfer boats, 3 freight line boats, 16 barges, 2 wrecking boats, 1 propeller dredging machine, and scows. There are 146 miles of underground railways, of which 59 have T rails, 38 miles strap rails, and 49 miles wooden tramways; also outside of, but connected with mines, there are 16 ¾ miles of T rails; also 3,981 mine cars and 3 mine locomotives. The horse and mule account is represented by 40 horses and 526 mules. The company owns in Pennsylvania, upon the line of the canal or convenient thereto, 2,076 acres upon which are used for reservoir purposes; also about 125 acres upon which are erected a dry-dock, 35 houses, 2 offices, 12 barns and 5 shops. The Company owns in New York State upon the line of its canal and adjacent to it 6,263 acres, upon which are 135 houses, 11 offices, 52 barns, 22 shops and 9 storehouses. Of timber and reservoir land in Pennsylvania besides the property already enumerated, the Company owns 3,969 acres. At Rondout and Kingston Point it own 220 acres. Upon the last named property are situated 2 brick offices, 4 engine houses, 1 carpenter shop, and sheds; also the engines, machinery, etc. requisite to handling 2,000,000 tons of coal per annum. The corporation has within the past 54 years secured an immense property, constructed a canal 108 miles in length,

operated hundreds of miles of railway, marketed 37,000,000 tons of coal and divided among its stockholders more than \$39,000,000. Since its incorporation it has disbursed more than two hundred millions of dollars." (*Honesdale Citizen*, August 23, 1877)

Horses and Mules: First Anthracite District, 1887

Statistics on mules from mine reports

Reports of the Inspectors of Mines, First Anthracite District, 1887, p. 22:

	Number of Horses and Mules	Total Number of Persons Working in Mines
	-----	-----
Coal Brook Tunnel, Bottom vein	30	226
Midland Tunnel, Bottom vein	29	169
Dixon Shaft, G or Big vein	6	24
Dixon Shaft, Clark vein	16	96
Eddy Creek Shaft, Grassey Island vein	40	350
Olyphant No. 2 Shaft, Grassey Island vein	22	213
Grassey Island Shaft, Grassey Island vein	27	214
Jermyn No. 1 Shaft, Archbald vein	36	242
Leggitt's Creek Shaft, Diamond vein	9	41
Leggitt's Creed Shaft, G. or Big vein	29	148
Marvine Shaft, Diamond vein	4	23
Marvine Shaft, G. or Big vein	32	246
No. 1 Shaft Carbondale, Bottom vein	8	81
No. 3 Shaft, Carbondale, Bottom and Top vein	7	104
White Bridge Tunnel, Bottom and Top vein	17	134
Powderly Slope, Top vein	9	91
Powderly Slope, Bottom vein	16	117

Von Storch Slope, Diamond vein	14	88
Von Storch Slope, G. or Big vein	14	106
Von Storch Slope, Clark vein	34	240
White Oak Slope, Archbald vein	13	137
White Oak Drift, Archbald vein	10	59

In the 22 mines owned and operated by the Hudson Coal Company in 1929 there were "more than six hundred and fifty miles of railroad track, on which are used 275 electric locomotives and 1,100 mules." *Mining and Preparation of Anthracite. The Fuel Supreme. 1823-1929.* The Hudson Coal Company, Scranton, PA.

The Use of Horses in the South Wales Coalfields:

Speaking of mining methods in the South Wales coalfields, Ley states: "Ponies were used in these drifts and in the early days were heavily blinkered with a form of leather cap that covered the top of the head. It was fitted with a still [sic; perhaps "stiff"] leather peak and the complete piece protected the head and face of the horse, restricting its vision at the same time. Some of the seams were narrow and the need to save labour and haulage was uppermost in the minds of all involved. A common practice was to cut a mini tunnel in the roof of the drift to allow the passage of the pony's head and holes in the floor below, into which the animal would carefully place its feet. The horse could then pull the trams along more shallow tunnels and the miner avoided carving out a great deal of unnecessary rock. When required to turn at the other end the pony was forced to lower its head and place its nose between the forelegs before it could come about and make its return journey." (*The Iron Cradle Ystradgynlais and the Upper Swansea Valley* by Len Ley, 2005, p. 98)

Mules in American mines: wearing hats? special headways for the mules? John V. Buberniak, July 2010: "Never heard of special headways for the mules, but *yes* on the mule head gear."

7014

Mules and Horses for Work Not in Mines or on Railroad or Canal

Throughout the nineteenth century and well into the twentieth, teams of horses and mules continued to fulfill an important role as motive power for the D&H.

In 1862, when D&H Gravity locomotive engine, *Lackawanna* (D&H Engine No. 4: 0-6-0, built in 1862 by the Dickson Locomotive Works, scrapped in 1899), had to be moved from the Dickson Locomotive Works, where it was built, to D&H tracks at Providence, it was horses or mules that pulled the heavy wagon bearing the *Lackawanna* from Vine Street to Providence. It's

an interesting irony that the horses and mules that made it possible for the *Lackawanna* to fulfill its mission (to move Gravity cars for the D&H) were, in effect, putting themselves out of business (horses and mules were being replaced by machines) by helping to launch the career of the *Lackawanna*.

It's not clear who owned the horses and mules that did the hauling to tracks of the *Lackawanna*, possibly the Dickson Locomotive Works, possibly the D&H. Whatever the case, working horses and mules got the job done.

Here is what we read in the *Valley Road Summary* on the question:

". . . [*Lackawanna*] built for use between Olyphant and the mines. She also was sent to Honesdale, and is still there. All of the engines built prior to the extension of the [D&H] line to Vine Street, Scranton, in 1863, were transported from the Dickson works to Providence on heavy wagons, drawn by horses and mules."

7015

Mules in the Community

Mules had a presence in nineteenth century life, not only as working animals in the mines and on the railroad and the canal, but also in the D&H communities along the line of the railroad and the canal.

In September of 1875, a drove of mules passed up Carbondale's Main Street:

"Yesterday forenoon a drove of mules belonging to the D. & H. C. Co. passed up Main street. This is quite an uncommon sight, and is therefore worthy of notice." (*Carbondale Leader*, September 25, 1875, p. 3)

Why these mules passed up Main Street is not clear. Possibly they were being moved from one D&H work site to another?

A *drove* of mules. Technically, only a group of cattle is called a *drove* or *herd*. A group of mules is called a *barren* or *span*. A group of donkeys is called a *herd* or *pace*. A group of horses is called a *team*, *pair* or *harras*.

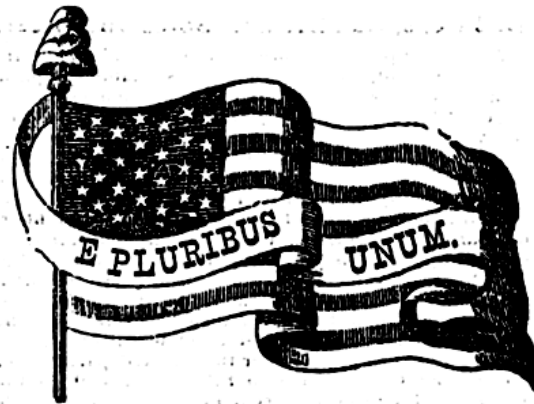
Working animals, in this case mules, also made an appearance in the celebrations that took place in Carbondale on the Fourth of July in 1876. In that regard, it is important to recall that celebrations on the Fourth of July were among the primary annual holidays/celebrations in America in the nineteenth century. On July 4, 1876, there took place in Carbondale, remarkably, a mule race from the Public Square to Flynn's Hotel. In the announcement in the July 1, 1876 issue of the *Carbondale Advance*, we learn that a mule race was one of ten sporting events scheduled for the afternoon of July 4, 1876:

"LATER, / The following sports will be introduced: / 1st. Mule race from the Public Square to Flynn's Hotel, for two prizes—the first \$8, and the second \$2. The last mule in the race is to win first prize, and the second last, the second prize, but no jockey will be allowed to ride his own mule in the race."

Here is the complete text of the announcement:

1776. 1876.

.The Glorious Fourth.



**MAGNIFICENT
DEMONSTRATION**

AT

CARBONDALE.

1776. First Centennial Fourth. 1876.

**The Old Pioneer City of the Valley
is Awake.**

Most extensive preparations are being made for the celebration of the centennial anniversary of our Nation's birth.

Neither time nor expense has been spared by the committee on arrangements to make the approaching Fourth of July a memorable day—a day with which to begin a new epoch in the future history of the progress of our city.

Four years ago, this little "City of the Valley" arrived at her majority. Already she is beyond her first quarter of a century in years; but she is yet young, vigorous, and perceptibly growing into magnitude and political importance.

Much praise is due the committee on arrangements. The zeal exhibited by them in their patriotic efforts to make the centennial celebration eclipse all former displays in our city, bespeaks them the thanks of our citizens.

The arrangements for the grand demonstration are so far completed that the committee is enabled to present the following partial program:—

AT SUNRISE,

Grand overture of 100 great guns, with little gun accompaniment; also Oratorio on steam chimes and trombones, accompanied by the tintinnabulations of the bells.

LATER,

There will be an imposing parade of civic and other societies, assisted by a magnificent display of the trades and professions of the city.

10.30 A. M.,

The Societies, under the charge of Colonel Alfred Dart, will assemble on the Public Square.

ORDER OF PROCESSION.

Grand Marshal, Col. A. Dart, with aids.
Car of Liberty drawn by 38 Star equines.
Jermyn Cornet Band.
Municipal Officers in Carriages.
Firemen, with Hose Carriage and Engine beautifully decorated.
Rushbrook Lodge, No 850, I. O. O. F., of Jermyn.

Lackawanna Encamp't, No. 16, I. O. O. F.
Carbondale Lodge, No. 249, A. Y. M.
Cambrian Lodge, No. 58, I. O. O. F.
Olive Leaf Lodge, No. 156, I. O. O. F.
and other kindred associations.

SECOND DIVISION.

Cadet Drum Corps.
Cadet Father Mathew Society.
Excelsior Band of Brooklyn.
Father Mathew T. A. B. Society,
and visiting Temperance Societies.

THIRD DIVISION.

Citizens, Trades and Professions.

ORDER OF MARCH.

The procession will move up Main street to Church; down Church street to Eighth; Eighth to Main; Main to Seventh; Seventh to River; River to Dundaff; Dundaff to Main; up Main to Lincoln avenue; Lincoln ave. to Washington st.; Washington to Seventh; Seventh to Main;

up Main to City Hall, where the speaker's stand will be erected, and where a patriotic oration will be delivered and the Declaration of Independence read. The procession will thereafter disband until 1.30 P. M.

AT 2 O'CLOCK P. M.

The most extensive fantastic exhibition ever witnessed in Carbondale will take place, portraying in burlesque the triumphs and defeats, wisdom and follies, foibles and conceits of the last hundred years.

This display will undoubtedly transcend in extent and variety all attempts heretofore made in this direction.

LATER,

The following sports will be introduced:

→ 1st. Mule race from the Public Square to Flynn's Hotel, for two prizes—the first \$8, and the second \$2. The last mule in the race is to win first prize, and the second last, the second prize, but no jockey will be allowed to ride his own mule in the race.

Mule Race
from the
Public
Square to
Flynn's
Hotel

2d. A foot-race from Public Square to Flynn's corner; prize, \$6.

3d. A foot-race for boys under 16 years; prize, \$4.

4th. Satisfaction Race, free to all, prize \$3

5th. Sack race on the Public Square, prize \$5.

6th. Standing long jump, without weights, prize \$4.

7th. Hop step and leap, prize \$3.

8th. One hundred yards race, prize \$5.

9th. Swine with lubricated carbuncular excrescence at the extremity of the coccygeal vertebra, holder to retain prize.

10th. A Balloon ascension, with trapeze performance one thousand feet in air, and grand promenade concert by the Jermyn Band.

Again, in 1877, another drove of mules passed up Carbondale's Main Street, this time on their way to the mines in Forest City:

"A drove of mules on their way to the mines at Forest city passed up Main street at about two o'clock one morning last week, accompanied by a party of the noisiest men that could be found, who, with their loud yelling, awoke nearly all the residents along the line of march." (*Leader*, October 27, 1877, p 3)

And then again, in 1885, a drove of Mules passed over the Moosic Mountain "on their way to the raging canal.":

"A drove of mules passed over the [Moosic] mountain on Wednesday on their way to the raging canal." (*Carbondale Leader*, March 27, 1885, p.1)

7016

Horses and Mules on the canal

And speaking of mules on their way to "the raging canal," it is important to remember that the D&H Canal could not have been built, 1825-1828, without the help of working horses and mules (and probably oxen).

We have not seen statistics on the number of horses and mules that were used to construct the D&H Canal, but it seems safe to say that, given the nature and the extent of the work to be accomplished, there must have been close to a thousand animals that were a part of this gigantic project: construct a canal, 108 miles long, from Honesdale to the Hudson River.

And once the D&H Canal was a physical reality, horses and mules continued to play a crucial role in the successful daily operation and maintenance of the canal.

Once the canal boats were filled with coal or other freight at Honesdale they were then pulled 108 miles by mules or horses to the Hudson River. Once emptied, the canal boats were then pulled back to Honesdale by working animals.

From the "Notice to Boatmen" that was placed in the March 14, 1851 issue (p. 3) of the *Carbondale Transcript and Lackawanna Journal*, we learn a great deal about the D&H Canal in 1851:

--there were three kinds of boats on the canal: (1) the largest, pulled by two horses, 105 tons; (2) scows (a flat-bottomed boat with a blunt bow), also 105 tons and pulled by two horses, installment payment \$16 per trip; (3) smaller boats, pulled by one horse, and carrying 70 to 75 tons, installment payment \$16 per trip

--the rates of freight from Honesdale to Rondout for a trip of 11 days (95 cents per gross ton), 12 days (93 cents per gross ton), and more than 12 days (90 cents per ton); reserving \$23 from each trip for the payment of the boat

--the rates of freight from Hawley to Rondout for a trip of 10 days (90 cents per ton), 11 days (88 cents per gross ton), and more than 11 days (85 cents per gross ton); reserving \$21 from each trip for the payment of the boat

--out of each cargo, whether from Honesdale or from Hawley, \$5 and the fractions of a dollar will be retained until the end of the season

--the locks are maintained day and night and trips can be made from Honesdale in 11 days, from Hawley in 10 days, without a change of horses

--the river freight from Rondout to New York will be 21 cents per ton, reserving therefrom \$5 toward the payment of the boat

--the charge for unloading on coal will be 5 cents per ton, to be retained out of the freight on each trip

Here, then, is that *Notice to Boatmen*:

NOTICE TO BOATMEN.



The Delaware & Hudson Canal Company are now prepared to enter into contract with, and sell Canal Boats to temperate and industrious men, on favorable terms, to be employed in freighting coal from Honesdale and Hawley to Rondout and New York.

The boats will average this year about 105 tons.

The rates of freight for 1851 will be as follows:

From Honesdale to Rondout, making the trip in 11 days, 95 cts. per gross ton; from Honesdale to Rondout, making the trip in 12 days, 93 cts. per gross ton; from Honesdale to Rondout, over 12 days, 90 cts. per gross ton—reserving from each trip \$23 towards the payment of the boat.

From Hawley to Rondout, making the trip in ten days, 90 cts. per gross ton; from Hawley to Rondout, making the trip in 11 days, 88 cts. per gross ton; from Hawley to Rondout, for a trip over 11 days, 85 cts. per gross ton—reserving from each trip \$21 towards the payment of the boat.

Out of each cargo, whether from Honesdale or Hawley, \$5 and the fractions of a dollar, will be retained until the end of the season.

The Canal is 108 miles long, the distance to Hawley 99 miles. The locks are tended by day and night, and trips can be made in 11 days from Honesdale and 10 days from Hawley without a change of horses. The Company engage to supply the freight and full employment for the boat.

The river freight from Rondout to New York will be 21 cts. per ton, reserving therefrom \$5 towards the payment of the boat. Towing and wharfage free.

The Company have also a small number of Scows to let. They are of the same capacity as large boats, and will come under the same terms of freight as those boats except the instalment, which will be only \$16 per trip.

Boatmen can also be supplied with smaller boats, towed by one horse, and carrying from 70 to 75 tons. Freight the same as large boats. Instalment only \$16 per trip—3 and the fractions of a dollar to be retained out of each cargo until the end of the season.

The charge for unloading on coal delivered will be 5 cts. per ton, which will be retained out of the freight of each trip.

Application to be made personally or by letter to the undersigned, at the office of the Delaware and Hudson Canal Co., 31 Wall street, N. York, or to the Del. & Hud. Canal Co., Rondout, Ulster Co. N. Y.

WILLIAM MUSGRAVE,
Vice-President.

New York, Feb. 10, 1851.

2-m3

In addition to the D&H coal boats on the Canal in 1851, there were also no less than thirty-six Deck Canal Boats that were operated by Wilbur's Delaware & Hudson Canal Line. These 36 boats were made available to the general public "for the transportation of Merchandize direct from New York to Honesdale, *daily*, without transshipping at Rondout or Eddyville."

Wilbur's also announced: "As soon as the Enlargement of the Canal is completed and in good running order, the Proprietors of this Line have it in contemplation to establish *relays of Horses*, by which boats will be run both Night and Day, consequently Freight can be *sent through in much quicker time* than by the old system of doing business."

Express delivery 1851: "*relays of Horses*, by which boats will be run both Night and Day." This is customer service at its best. It should come as a surprise to no one that Wilbur's Delaware & Hudson Canal Line was a great success.

Managing this freight line were "H. Wilbur, 110 Murray-street, N.Y." and "J. A. Patmor, Honesdale, Pa."

The Patmor/Wilbur boat basin in Honesdale was an arm of the D&H Canal that was across Main Street from the D&H Canal, between Seventh and Eighth Streets. To enable traffic to cross the arm of the canal which extended across Main Street about where the Honesdale Dime Bank now stands, a bridge, usually referred to as 'the basin bridge,' was erected. See pages 301-302 in the volume in this series on the 1868 configuration of the Gravity Railroad for a map showing the exact location of the Patmor/Wilbur boat basin.

Here, then, is a copy of the ad that Wilbur's Delaware & Hudson Canal Line placed in the April 18, 1851 issue (p. 3) of the *Carbondale Transcript*, and *Lackawanna Journal*:

WILBUR'S DELAWARE & HUDSON CANAL LINE.

ARRANGEMENTS FOR 1851.

THE undersigned announce to the Public the following arrangements for the coming season, viz: they will run the following

The names of the
thirty-six Deck Canal
Boats of Wilbur's
Delaware & Hudson
Canal Line

→ DECK CANAL BOATS,

WASHINGTON,
ALIDA,
COMMERCE,
DANIEL WEBSTER,
W. H. FALLS,
HENRY CLAY,
JANE FRANCES,
MAY FLOWER,
NEW YORK,
NAPANOCK,
OCEAN WAVE,
ORBIT,
OREGON,
RAINBOW,
ROSE,
ULSTER,
UNION,
R. F. LORD,

HIBERNIA,
M. WURTS,
DETROIT,
EMPIRE,
R. H. STONE,
NEWPORT,
W. R. KING,
I. HAWLEY,
J. EWEN,
M. J. MERCHANT,
E. MURRAY,
J. C. GUNN,
CERESCO,
FONDULAC,
WISCONSIN,
BLAZING STAR,
IRVING,
TUNKHANNOCK,

"... New York to
Honesdale, daily,
without
transshipping at
Rondout or
Eddyville."

→ making *Thirty-Six* in number, for the transportation of Merchandize direct from New York to Honesdale, *daily*, without transshipping at Rondout or Eddyville.

All Merchandize shipped by these Boats will be *Insured by a General Policy of Insurance* for the season *on each Boat*, without any additional charge to the Shipper. These boats will be towed from New York to Rondout by a

Daily Line of Steamboats,

which will greatly assist in giving dispatch in forwarding Freight to the various points of destination on this route. Merchandise will be received Daily in New York, at the Pier, foot of Jay street, until 5 o'clock, P. M., after which hour no Receipts will be given or Freight taken.

"... Codfish in bundles must be properly boxed. . ."

→ All small Parcels, also Codfish in bundles must be properly boxed, or they will not be received.

The Prices for Freight will be established at the same Rates as for the past year; subject, however, to be reduced or advanced the same amount that the tolls may be reduced or advanced from what they were during said year.

"... relays of Horses, by which boats will be run both Night and Day. . ."

→ As soon as the Enlargement of the Canal is completed and in good running order, the Proprietors of this Line have it in contemplation to establish *relays of Horses*, by which boats will be run both Night and Day, consequently Freight can then be sent through in much quicker time than by the old system of doing business.

Service to Dunmore, Scranton, Pittston, and Wilkes-Barre via the Pennsylvania Coal Company's Gravity Railroad to Dunmore from Hawley

→ Arrangements having been made with the **Pennsylvania Coal Company,** this Line will now be extended to DUNMORE, SCRANTON, PITTSBURGH and WILKESBARRE via HAWLEY, at which place the business will be attended to by W. GILMORE.

JOHN A. PATMOR will attend to the business of this Line in *Honesdale*; The Delaware & Hudson Canal Co. in *Carbondale* and *Archbald*, and H. WILBUR in New York. R. H. STONE, will be the Agent on the Dock, foot of Jay-street.

ⓘ All Freight will be subject to payment on delivery of the same.

Riggs & Hall were located at the same address in New York and H. Wilbur, and advertized their flour and seed products for sale to Carbondale customers in this same issue of the *Carbondale Transcript*, and *Lackawanna Journal*.

H. WILBUR, 110 Murray-street, N. Y.
J. A. PATMOR, Honesdale, Pa.
New York, April 1, 1851.

→ Messrs. Riggs & Hall will continue the Flour and Seed trade at 110 Murray Street, where can constantly be found a general assortment of all brands and qualities usually found in the New York market. They will keep constantly on hand, a general assortment of Clover, Timothy, and other Seeds, all of which will be disposed of at the lowest market rates.

H. WILBUR, 110 Murray-street.
April 4, 1851. 7-1f

This amazing ad, with only minor modifications, was run in the October 3, 1851 issue (p. 4) of the *Lackawanna Citizen*:

WILBUR'S

Delaware & Hudson Canal Line.

ARRANGEMENTS FOR 1851.

THE UNDERSIGNED announce to the public, the following arrangements for the coming season, viz: they will run the following

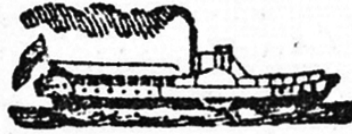
DECK CANAL BOATS,		
<i>Washington,</i>	<i>Napanock,</i>	<i>Hibernia,</i>
<i>Alida,</i>	<i>Ocean Wave,</i>	<i>M. Wurts,</i>
<i>Commerce</i>	<i>Orbit</i>	<i>Detroit</i>
<i>D. Webster</i>	<i>Oregon</i>	<i>Empire</i>
<i>W. H. Falls</i>	<i>Rainbow</i>	<i>R. H. Stone</i>
<i>H. Clay</i>	<i>Rose</i>	<i>Newport</i>
<i>Jane Frances</i>	<i>Ulster</i>	<i>W. R. King</i>
<i>May Flower</i>	<i>Union</i>	<i>I. Hawley</i>
<i>New York,</i>	<i>R. F. Lord</i>	<i>J. Ewen</i>
<i>M. J. Merchant</i>	<i>E. Murray</i>	<i>J. C. Gunn,</i>
<i>Ceresco</i>	<i>Fondulac</i>	<i>Wisconsin</i>
<i>Blazing Star</i>	<i>Irving</i>	<i>Tunkhanock</i>

Making THIRTY-SIX in number, for the transportation of Merchandise direct from

New York to Honesdale, Daily,

Without trans-shipping at RONDOUT or EDDYVILLE.
All Merchandise shipped by these Boats will be insured by a *General Policy of Insurance* for the season on each Boat, without any additional charge to the Shipper.
These Boats will be towed from NEW YORK to RONDOUT, by a

Daily Line of Steamboats,



Which will greatly assist in giving dispatch in forwarding Freight to the various points of destination on this route.

Merchandise will be received daily in New York at the pier, foot of Jay street, until five o'clock P. M., after which hour no receipts will be given or Freight taken.

All small Parcels, also Codfish in Bundles must be properly Boxed, or they will NOT BE RECEIVED.

THE PRICES FOR FREIGHTING will be established at the same Rates as for the past year; subject however, to be reduced or advanced the same amount that the tolls may be reduced or advanced from what they were during said year.

As soon as the Enlargement of the Canal is completed and in good running order, the proprietors of this line have it in contemplation to establish Relay's of Horses, by which boats will run both Night and Day; consequently Freight can then be sent through in much quicker time than by the old system of doing business.

Arrangements having been made with the Pennsylvania Coal Co., *This Line will be Extended to Dunmore, Scranton, Pittston and Wilkesbarre, via Hawley*, at which place the business will be attended to by W. GILMORE.

John A. Patmor will attend to the business of this Line in Honesdale; Messrs. Maxwell & Ruthven in Carbondale; and the Delaware and Hudson Canal Company in Archbald, and Henry Wilbur in New York. R. H. Stone will be the agent on the dock, foot of Jay street.

HENRY WILBUR, 110 Murray st. N.Y.
JOHN A. PATMOR, Honesdale, Pa.

Messrs. RIGGS & HALL will continue the Flour & Seed trade at 110 Murray street, where will always be kept a general assortment of Flour of all brands and qualities usually found in the New York Market.— They will also keep constantly on hand a general assortment of Clover, Timothy, and other Seeds, all of which will be disposed of at the lowest market rates.

New York, April 11. 1851.] **HENRY WILBUR**,
313 110 Murray st. N.Y.

It is very interesting that Wilbur's made arrangements with the Pennsylvania Coal Company to do business in Dunmore, Scranton, Pittston, and Wilkes-Barre, via Hawley, at which place the business of the company will be attended to by W. Gilmore. In Honesdale the business will be attended to by John A. Patmore; in Carbondale by Messrs. Maxwell & Ruthven; in Archbald by the Delaware and Hudson Company; in New York by Henry Wilbur. The agent on the dock in New York, foot of Jay Street, was R. H. Stone.

From a notice in the *Wayne Independent* of January 17, 1884, we learn that there were sixty four teams employed along the line of the canal" in 1864. It is our understanding that "employed along the line of the canal" means "employed in the maintenance and upkeep of the canal."

"In 1864 D & H Canal Co. employed along the line of the canal 549 laborers, 100 mechanics, 53 foremen and assistants, and 64 teams. This number of men and teams did not include those employed at Honesdale and Rondout. That total number of men in the same service during 1882 was 203."(*Wayne Independent*, January 17, 1884)

Tow path horses were frightened "at the cars near Bolton Basin" and plunged into the Canal in July 1870:

"Yesterday afternoon about 2 o'clock, a team or horses became frightened at the cars near Bolton Basin, and plunged in the canal, carrying with them a little boy who was riding one of them. Fortunately, Mr. David Darragh was passing at the time, and at once jumped in and succeeded in rescuing the boy and getting the horses safely back upon the tow-path. But for this timely assistance the boy would have been drowned. *Port Jervis Gazette*." (*Wayne Citizen*, July 28, 1870)

Some of the new canal boats, in 1872, had stables for horses in midship:

"We notice some of the new canal boats have a stable for their horses in midships. They take their horses up a plank gangway from the towpath. Instead of leaving their horses at Rondout, they now take them on board, down and up the Hudson. *Ellenville Journal*." (*Wayne County Herald*, May 30, 1872)

C. V. Gillson has worked with the same two mules on the D. & H. canal for 23 years:

"Among the oldest employees on the Del & Hud Canal Co. is Mr. C. V. Gillson, now 58 years of age, and a resident of Sparrowbush. He has been in the employ of the Company for 40 years. He has 8 brothers and 3 sisters, the youngest of whom is 54 years of age, the eldest 73. Mr. Gillson

has become gray in the Company's service, and will probably travel the tow-path as long as his health will allow him. On Tuesday he started out for his work this season, accompanied by a faithful pair of mules, which by the way are about as well known as their master. They are 25 years old this spring. Mr. Gillson has used them on the canal for 23 years, averaging 8 round trips each season. The canal extends from Honesdale to Rondout, on the Hudson River, a distance of 108 miles. These faithful animals have thus traveled about one and a half times around the world. *Port Jervis Gazette.*" (*Wayne Citizen*, April 19, 1873)

PSPCA on the Job in 1873

Thanks to the initiative of Colonel M. Richards Mucklé, a Philadelphia businessman who was disheartened by the violence he witnessed against animals, the Pennsylvania Society for the Prevention of Cruelty to Animals was organized on June 21, 1867, and officially chartered on April 4, 1868. It was the first humane society in the commonwealth of Pennsylvania and only the second in the country after Henry Bergh's American SPCA

It is reassuring to know that the Pennsylvania Society for the Prevention of Cruelty to Animals was operational in 1873 and that agents of the PSPCA were on the lookout for incidents of cruelty to the hundreds of working animals on the Delaware and Hudson Canal. This we know from an 1873 newspaper notice from which we learn that Andrew Gildea, a captain on a D&H Canal boat was arrested at Honesdale for working a mule with its shoulders chafed raw:

"Andrew Gildea, a captain on a canal boat on the Delaware & Hudson canal, was arrested at Honesdale last week, by Messrs. Kilpatrick and Maltack, agents of the S. P. C. A., on the charge of working a mule with its shoulders chafed raw. James B. Eldred, Justice of the Peace, fined Gildea ten dollars and costs of prosecution, and ordered him not work the animal again while it was in that condition." (*Carbondale Leader*, August 2, 1873, p. 3)

A team of mules and a number of geese were killed in a stable fire on the towing path in December 1873:

"A little after 8 o'clock on Sunday evening last, the canal stable of Mrs. Colon, on the tow path, near W. H. Ham's boat yard in the lower part of town, was discovered to be on fire. The alarm was given and Engines No. 2 and 3 were promptly on the ground. The latter got a stream on the flames, but they had made such progress that it was impossible to save the building or any of its contents. A team of mules, a large quantity of hay, and a number of geese were burned up with the barn. The mules belonged to Tom Shanley. For a time the buildings in the boat yard were in imminent danger, only a few feet intervening between them and the fire, but the efforts of firemen and others prevented an extended conflagration. Loss \$500." (*Wayne County Herald*, December 11, 1873)

The mule business is looking up, the D&H boatmen will soon be on the war path:

"The mule business is looking up in this vicinity. Our D & H boatmen will soon be on the war path." (*Honesdale Citizen*, March 5, 1874)

A team of boat horses fell into the D&H Canal near Mongaup in April 1874:

"A team of boat horses fell into the canal near Mongaup one day last week and had a narrow escape from drowning." (*Honesdale Herald*, April 23, 1874)

Two thousand horses and mules worked on the D. & H. Canal in 1874:

"There are 1,029 boats freighting coal on the D & H Canal, giving employment to 3,000 men and boys, and 2,000 horses and mules." (*Honesdale Citizen*, June 4, 1874)

John Finley, Jr. has used the same team of horses on the Canal for nine years:

"Nine years ago this season John Finley, Jr., of the lower part of this city, commenced boating on the D & H Canal with boat No. 881. During those nine years Mr. Finley had used one team of horses, and a few days since he cleared his boat—that is, paid for it by the earnings of it. We'll venture to say that team of horses have been longer on the canal than any other and they are good for nine more years. *Rondout Freeman*." (*Honesdale Citizen*, September 3, 1874)

Teams of horses were used to clean out the canal basin at the end of the shipping season:

"A large force of men and teams are now engaged in cleaning out the basin from the summer's accumulation of rubbish, in order to have the canal in proper condition for the opening of navigation next spring." (*Honesdale Citizen*, December 9, 1875)

Wintering over canal horses at the end of the line at Rondout, 1875:

"The *Rondout Freeman* gives us an idea of the manner in which canal horses spend the winter at the end of the line. It says: The farmers in the county are now discussing the propriety of coming to the lower part of the city after canal horses to keep during the winter months. The price to be paid per month is regulated according to the eating capacity of the animal. If a horse is large and raw-boned, with little or no flesh on his ribs but little money can be made off him at even 8 or 9

dollars, but a small mule, if young, can be wintered over for \$5 a month and something will be left for pocket money and to pay for the trouble of carrying water to him. In some cases, the farmers try to make all the money possible out of the contract, and stint the animals so that when they come out in the spring, there is hardly life enough left in them to walk. Generally, however, good care is taken of them, and they are well fed on hay and other provender though hard feed is not given them, for if a farmer were to give a canal horse oats or ground food, he would have to take the animal for his pay, and then quite a balance would be due him. (*Wayne County Herald*, December 9, 1875)

A span of valuable mules drowned in the D&H Canal near the Honesdale Glass Works in August 1880:

"A span of valuable mules belonging to a boatman meandered into the canal near the Honesdale Glass Works on Friday and were drowned. Their rescue was rendered an impossibility owing to their being harnessed together and feed bags with oats tied over their noses. A subscription paper was passed among citizens and a sum of money raised to partially reimburse the unfortunate owner." (*Honesdale Citizen*, August 12, 1880)

To get their mules into condition in the spring so as to ready to begin working on the canal, most owners of canal mules enhanced the diet of their animals:

"The Del & Hud boatmen have commenced feeding their festive mule a few oats, in anticipation of the resumption of canal navigation on the Del & Hud Canal. It is quite a change from the usual winter's diet, fence and the east wind." (*Honesdale Citizen*, March 24, 1881)

Mules for sale from the Wyoming Valley were taken to Honesdale in the early spring of 1881:

"During the past week Honesdale dealers have brought in several mule delegations from the Wyoming Valley, for the canal market at this place. The price range from \$25 to \$150 per head." (*Wayne Independent*, March 24, 1881)

Many mules passed through Honesdale in early March 1881:

"Mules have been the chief article of traffic down town the past week. They will go to work on the crooked and narrow path which leads to Rondout on Monday next." (*Honesdale Citizen*, March 13, 1881)

Horses were invariably called upon to work in the repair of breaks in the D. & H. Canal, as they were following the heavy rains on Sunday, June 10, 1883, which caused a bad break in the canal just west of Huguenot on the twelve-mile level:

"On Sunday night during the heavy rains that occurred at about midnight a bad break was made in the D & H Canal and Hornbeck's stone culvert just west of Huguenot on the twelve-mile level. The banks at that point are of sand and a bad break occurred at nearly the same spot some years ago. The present one is an opening 80 feet in length through the towpath, etc., rushing water carved with the path for about 300 feet on each side of the break, slicing it down to a depth of 8 feet below the bottom of the canal, and also washing out the bottom for that distance. The berme bank is washed eight to ten feet deep for 300 feet. The stop lock gates were thrown up on both sides of the break before the level was drawn down more than a foot. The lower half of the stone culvert is torn out. The repairing will all have to be made with teams and will take nearly all the week. . . " (*Wayne County Herald*, June 14, 1883)

"A span of mules" plus a crew of three (usually a man and two boys) was required for every canal boat. In April 1884, there were more than 950 boats in service on the D. & H. Canal:

"The total number of boats in service on the canal now exceed 950. Of this number 22 are reported in Tidewater and most of the remainder are moving westward on the line of the canal for cargo. The round trip is made in from 10 to 14 days. Each boat requires a crew of three, which is usually composed of a man and two boys, and the service of a span* of mules." (*Wayne Independent*, April 10, 1884)

* The word *span* is derived from the Dutch *spannen*. There are two accepted meanings of the term: (1) A pair of animals, such as oxen or mules, matched as in size or color and driven as a team, and (2) A group of mules or other animals such as horses or oxen harnessed together to plough or haul wagons. In the context of the D&H canal, a *span* means two horses or mules.

During the hard times of July 1885, the D&H boatmen turned their horses loose to fend for themselves:

"The D & H Canal boatmen are hard up, and they are compelled to turn their horses loose to pick a living for themselves. John Raferty says he has boated 23 years and this year beats them all for hard times." (*Honesdale Citizen*, July 9, 1885)

A severe summer storm took place on Monday, August 3, 1885, in the Port Jervis area which caused great damage to the D&H Canal. Thirty teams were required to repair the damage. A summary statement of the damage caused by the storm is given in the *Honesdale Citizen* of August 6, 1885:

"Two serious breaks of 150 feet each, in the Del & Hud Canal, 4 miles this side of Port Jervis, were the result of Monday's severe storm. Two light boats and three loaded ones were washed out with the bank."

A more complete account of the storm damage is given in the *Wayne County Herald* of August 6, 1885:

"THE D & H CANAL CO'S LOSS—UPWARDS OF 200 FEET OF THE CANAL WASHED OUT. The D & H Canal Co. is the greatest sufferer by the storm in this section, their direct loss being estimated at no less than \$150,000, while the carrying way of the towpath for a distance of about 200 feet will necessitate closing of the canal for at least 2 weeks. Their loss was brought about by a combination of circumstances. At Bolton Basin, 3 miles west of this village, were tied up Monday evening about 20 canal boats. Emptying into the basin is the waters of the Shingle Kill, usually a small stream but swollen to a height never before known by the heavy rain of Monday. The stream overflowed its banks and carried into the basin vast quantities of driftwood and other debris which blocked the sluice way and thus prevented the water from escaping. In endeavoring to clear away the debris a loaded canal boat got lodged across the sluice way and the water raised rapidly in the level, overflowing the tow path to a depth of upwards of 2 feet, the water tumbling over into the Delaware river below. / At about half past 8 o'clock, the towpath 50 feet east of Mrs. Alex Simpson's hotel, gave way making a gap in the embankment 70 feet long and 15 feet below the bottom of the canal. The banks of the canal from this point to Sparrow Bush are filled with slides, and following this break for 100 feet east the bank is in a very shaky condition. Three loaded and 2 boats are lodged there, one of them toppling into the gap. About 100 feet west from Mrs. Simpson's the Shingle Kill empties into the Delaware river the sluice way also being used by the D & H Canal Co as a waste weir. This waste weir was open about half past 8, shortly after the bridge over the Shingle Kill near Josiah Stearns's gave way, and a mass of debris and a loaded boat was thrown broadside across the mouth of the weir virtually rendering it useless. The water is now 2 feet deep on the embankment of the canal. The boatman hastily placed their horses and mules in the stables and wading deep in the water, removed their families to the woods on the other side where the latter passed the night without shelter amid the pelting rain. / At 10 o'clock the bank a few feet west of the waste weir gave way carrying canal boats and everything before it together with a portion of the Canal co's barn. The scene at this time is impossible to describe. The loss to the company, which it will take weeks to repair, will run into the thousands. / This morning the Shingle Kill is a raging torrent still. One loaded canal boat has been carried to the gap and lays with its bow projecting into the Delaware, while 4 others are close by with their sterns toward the river, forming a bridge by means of which the visitor can cross to the opposite side of the gap. With the exceptions of a few slides east and west the canal embankment otherwise is in fair condition as far as heard from, and the boats are running to this village. The waste weir at Sparrowbush was opened by sawing the gates away at 6 o'clock. Had it not been for the promptness shown here the canal bank from the basin to the

former place would today be in the Delaware. The telegraph wires between here and Bolton Basin and Mongaup are down and manager Robinson was hard at work this morning making telephonic indication between the two places. The boatmen claimed that if the waste weir in the basin had been opened in time the break would not have occurred. All the loaded boats in the basin will have to be unloaded and some of them, it is thought, are so badly wrenched that they are useless. The owners of the boats will be heavy losers as their property is damaged and they will be thrown out of employment for a long time. / The danger of Mrs. Simpson's hotel being carried away was so serious for 2 or 3 hours that the occupants all sought refuge in flight." (*Wayne County Herald*, August 6, 1885).

The following week, the *Honesdale Citizen* reported that the repairs to the canal were progressing rapidly, with 400 men and a large number of teams repairing the damage:

"Work on the breaks in the Del & Hud canal this side of Port Jervis is progressing rapidly considering the extent of damage. Nearly 400 men are at work, with a large number of teams. One boat had to be broken and several others moved. The canal will not be re-opened for business for a week or 10 days." (*Honesdale Citizen*, August 13, 1885)

In the *Honesdale Citizen* of the following week, it was reported that the repairs at Bolton Basin, four miles this side of Port Jervis, had been completed and that the Canal was again open:

"The recent extensive break in the Del & Hud Canal at Bolton Basin 4 miles this side of Port Jervis, was completed on Sunday, so the boats began passing over it Monday morning. A large number of boatmen were given employment upon the work of repairing the damage." (*Honesdale Citizen*, August 20, 1885)

Ironically, most of the 400 laborers who repaired this break in the canal, using thirty teams, were boatmen who were given ten days of employment and were thus enabled to make even larger wages in repairing this break in the canal than by boating. In the August 20, 1885 issue of the *Wayne County Herald* we read:

"The large break in the D & HG Canal at Bolton Basin, 3 miles this side of Port Jervis, has been repaired and empty boats and loaded ones are running again. People who viewed the break directly after it occurred, says the *Gazette*, would never have believed it possible to repair it in 10 days, but that has been the exact time occupied in the work, and this too, without working the force of men at night. The entire cost of repairing the damaged boats, 5 in number, will not exceed \$7,000. The accident gave 10 days employment to a force of 400 men and 30 teams [emphasis added] at liberal wages. The majority of the laborers were boatmen who were thus enabled to make even larger wages than by boating, and in all about \$3,000 was paid out in

wages. Supt. Rose looked personally after the work of repairing the break. It took 20,000 yards to fill the openings. The earth was obtained from a hill on the berme side directly opposite the break, the teams moving in a constant procession and in a circle over improvised bridges across the canal. Great credit is due Mr. Rose for the rapid manner in which he pushed forward the work and brought it to a successful termination without any one of the employees being injured. It is not easy job to keep 400 men in constant employment in such a small space and have the work progress without halt or hindrance. As an illustration we will state that in 15 minutes after the last load of dirt was placed on the bank, the temporary bridges across the canal were torn up and empty boats began to move toward Honesdale." (*Wayne County Herald*, August 20, 1885)

And the canal boat that went down the bank to the Delaware River during the wash out, that, too, was to be raised during the repair operations:

"Skilled workmen are also employed in raising the boat which went down the bank to the Delaware river. It is quite a job to raise a large boat, weighing about 35 tons, at least 25 feet in the air, and sliding over a canal bank, but the gang at work expect to have it floating in the canal by next Tuesday night. The work of raising is done by means of powerful hydraulic rams and wedges, the boat setting on a framework of heavy timbers." (*Wayne Independent*, August 20, 1885)

At the time of the spring cleaning of the canal basins in Honesdale in 1888, twelve of the seventeen D&H teams went on strike because the D&H hired about 25 farmers and their teams of local to do the job.

"Every spring the D & H Canal Co. engage a large number of teams to haul out the mud and culm that accumulates in the canal basins. Last Saturday 12 out of the 17 teams at work struck, because the company saw fit to go outside the Knights and employ the teams of farmers. The work, however, goes on, about 25 farmers and their teams having been engaged by the company. All the stablemen in the lower part of town refuse to keep or feed the farmers' teams, and they are obliged to go elsewhere for accommodation. The pay they receive is \$3 per day. A part of the work having been done last fall, the job will not be a lengthy one, it will likely be finished this week." (*Wayne Independent*, April 5, 1888)

In 1892, we learn from an article published on page 2 of the *Carbondale Leader* on July 21, that there were between 500 and 700 horses and mules that worked at towing boats on the D&H Canal:

“. . . The [canal] locks are worked from 6 o'clock in the morning until 6 at night. / When business is unusually heavy a man is kept at work locking boats through until ten o'clock. There

are over 600 canal boats owned by the Delaware & Hudson canal company, which are engaged in the coal trade, and a number of cement boats. At the beginning of the season the company draws up a contract with a man who agrees to furnish his own horses and draw the boat for the season. This contract is often sublet, sometimes several times. There are between 500 and 700 horses and mules used in the business, and a sorry looking lot of animals they are too, when taken as a whole. They are never expected to go off a walk [i.e., they never gallop or move too quickly], many of them couldn't do it, even if they had no heavy boat behind them. Every night at six o'clock the animals are unharnessed and allowed to rest until the next morning when they again begin their tedious work. The boats used on the canal cost about \$1,900 and are made at Kingston and other points along the canal. . ." (*Carbondale Leader*, July 21, 1892, p. 2)

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Housing and Care of Mules in the Mines and Out

Where were the D&H working horses and mules that worked on the railroad stabled?

Many were stabled along the planes on the Gravity Railroad. Those that worked in and around Carbondale were stabled in several buildings that were located west of the alleyway that ran between Salem Avenue (formerly called Wall Street) and Lincoln Avenue (formerly known as Foundry Street). In those buildings, during the 1940s through 1960s (perhaps starting earlier and ending later) John Booth's various enterprises were located.

In the detail from the July 1885 Sanborn map that is given on the following page, those buildings, identified as "D&HC.CO.'S STABLES," are shown.

Wagon Shed

Foundry Street is now
called Lincoln Avenue

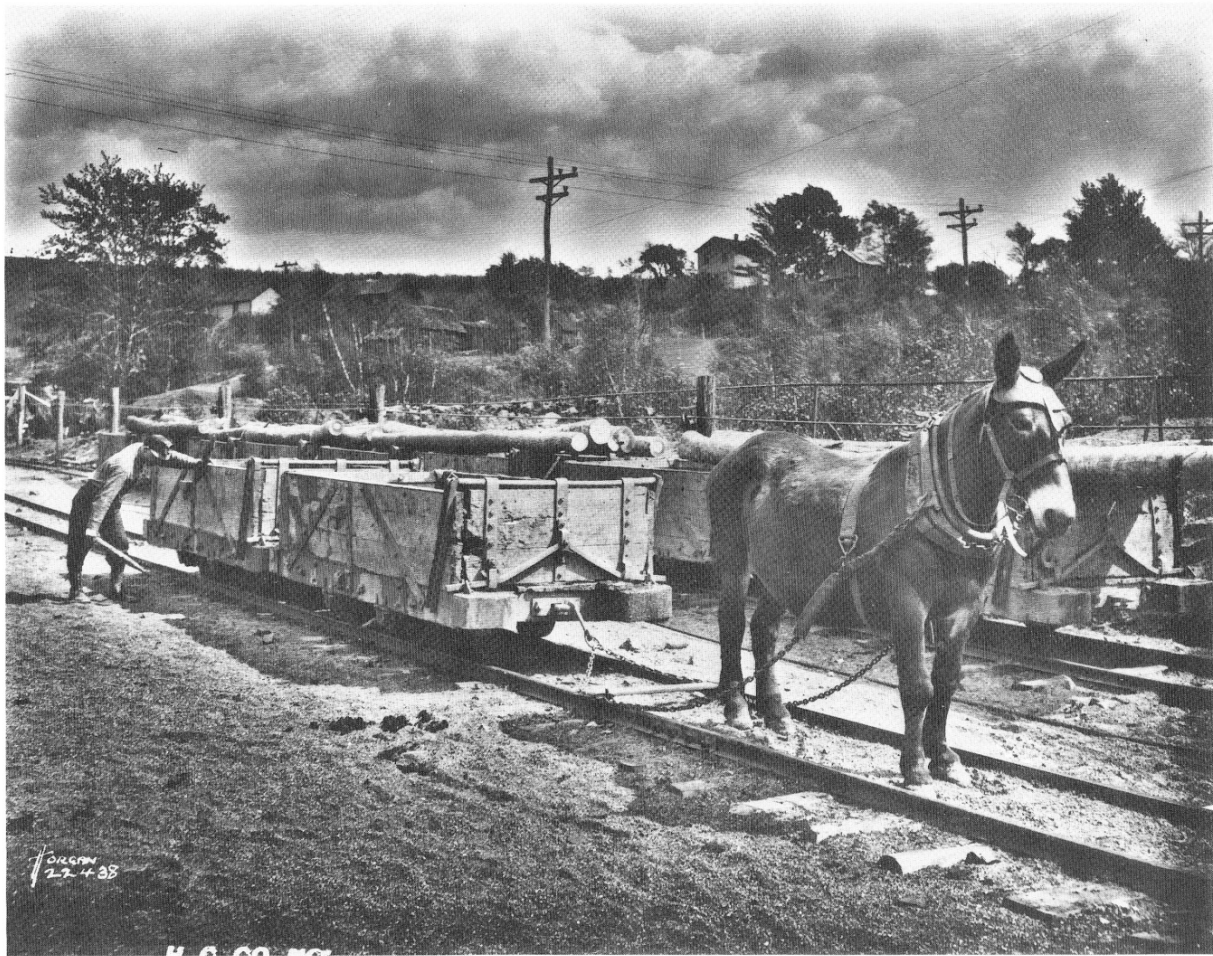
"D&HC.CO.'S
STABLES

Between these
two buildings
is the "Stable
Yard"

"D&HC.CO.'S
STABLES

Between these
two buildings
is the "Stable
Yard"

Wall Street is now called
Salem Avenue



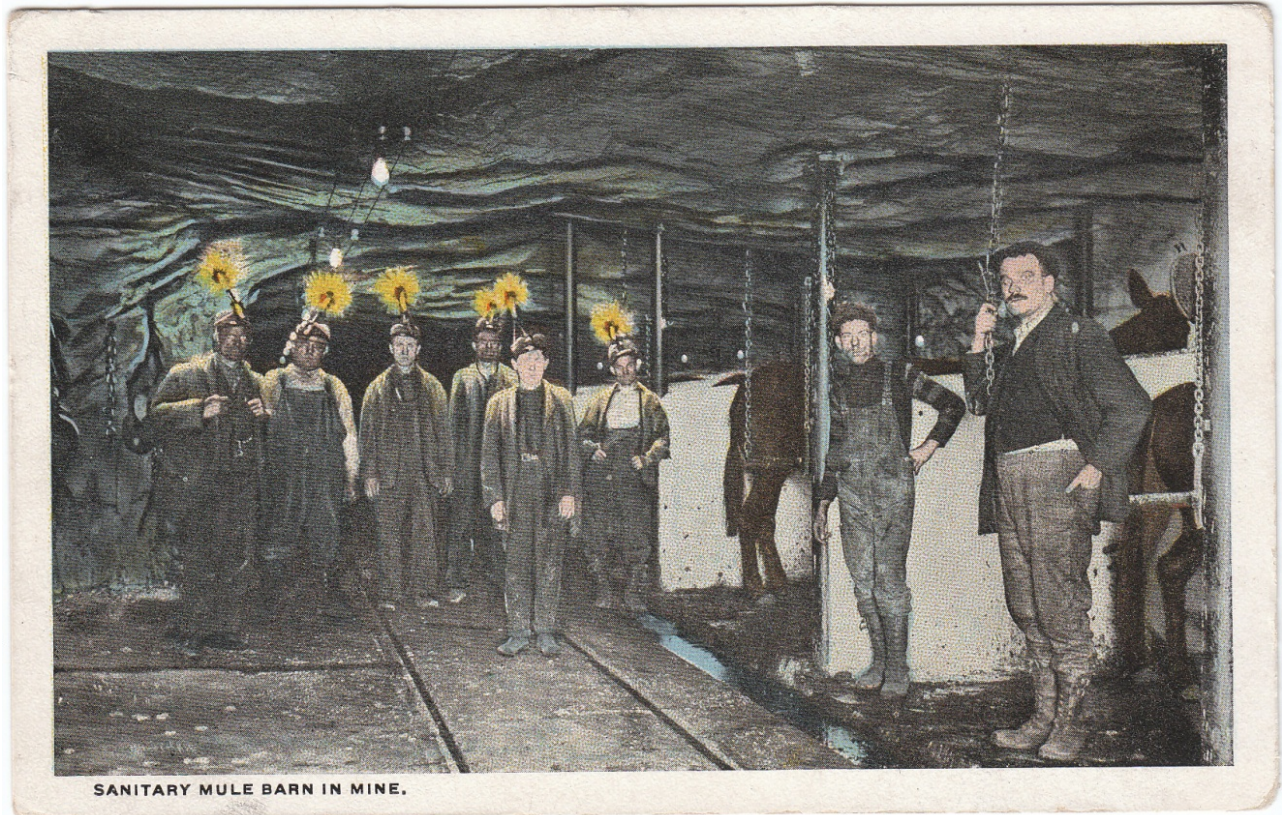
PICTURE OF OLD MULE NAMED BARNEY AGE 24 YEARS
 The mule driver is about to brake the mine car wheel with a wooden sprag.
 HORGAN #22438, c. 1921

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Photo by John Horgan, Jr.; photo #22438, c. 1921. "Picture of old mule named Barney age 24 years." This photo is reproduced here from page 61 of *Percival and Kulesa*.

The mules that worked in the mines were stabled both underground and above ground. In *Miller and Sharpless* (pp. 101-102), learn a great deal about the housing and care of mules underground, about the men and boys who were their drivers, and about the behavior of the mules themselves as they went about working in the mines:

“Mules provided the locomotive power in the mines before the introduction of the electric motor. They were highly valued because they were more sure-footed , more powerful, and sturdier than horses and less susceptible to illness. Usually they were kept underground in a widened section of the gangway known as the ‘barn.’ Their care was supervised by a ‘barn boss,’ who saw that their drivers cleaned out their stalls, fed and watered them daily, combed them, and cleaned the harnesses. The attention they received caused some miners to feel that the mules were valued more than the men. / Mule drivers were usually boys in their early teens who enjoyed the job because it gave them freedom of action. The boisterous and aggressive drivers, who already had several years’ experience underground, learned the quirks and idiosyncrasies of individual mules—and the mules of the boys—so that sometimes the mules responded to the commands of only one particular driver. Frequently mules shared driver’s lunches or developed a taste for tobacco. It was not unusual for a driver to pull a plug of tobacco from his pocket, give a bite to his mule, and jam the remainder into his mouth. / The boys used no reins to drive the mules. The drivers sat or stood on the front bumper of the car and either shouted commands or directed the mules with a ‘black snake’ whip made of braided leader attached to a short, stout stick for a handle. The whips had ‘crackers,’ or tassels made of hemp, on their tips which made sharp reports when the whip was swung in the air and jerked back abruptly. The mules learned what the crack o the whip meant and were directed accordingly. Sometimes the drivers simply led the mules, harnessed either singly or in tandem, the lead animal with a miner’s lamp attached to its head or hung from its collar. / . . . The mules, notoriously stubborn creatures, had the same independent spirit as the mine workers. Accustomed to pulling a certain number of cars, they simply would not move if an extra one was hitched up. They sometimes stopped work instinctively at quitting time, even in mid-trip, and nothing short of dynamite could move them. Curses and beatings from drivers only elicited a swift kick in return. Mules that spent years in the mines would tremble and became nearly delirious with joy when they were finally brought to the surface and exposed to sunlight, grass, and fresh air. Some memory of the dread darkness below would remain, and at times nobody could force or entice them back down. . . / Eventually mules and driver boys were replaced by electric ‘trolley’ locomotives equipped with wire rope or cables to pull cars out of chambers and about the mines. . .”



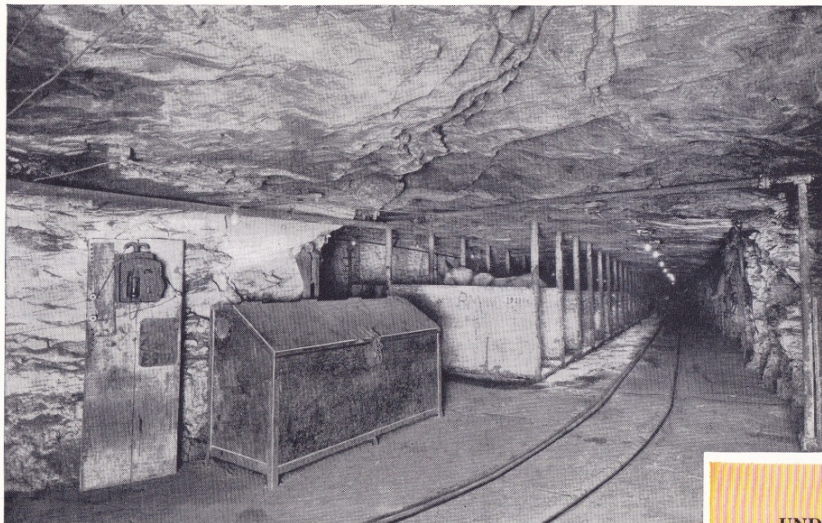
Sanitary Mule Barn in Mine. Post card in the collection of the Carbondale Historical Society and Museum, Inc.

James J. Barrett's work career for the D&H began in 1868 with his driving a mule on the Mill Creek slope for \$1.15 per day. His work there is described in the biographical portrait of the man that was published in *The Delaware and Hudson Company Bulletin* in 1932, as follows:

"In 1868, after eight years as a slate picker, James [J. Barrett] entered The Delaware and Hudson Canal Company's employ in the Coal Department, driving a mule on the Mill Creek (Hudson) slope for \$1.15 per day. A slope, in anthracite mining parlance, is an inclined entrance to an operation near the surface of the ground, through which empty cars are taken into the mine and coal is removed. James drove his mule, or team of two mules, down the slope in the morning, through the maze of tunnels to the chambers in which the miners were working, and pulled the loaded cars to the foot of the slope, from which point they were drawn out by means of a steel cable and a stationary engine. He hauled the empty cars from the foot of the incline back to the chambers for loading. When the day's work was over, late in the afternoon, the mules were driven out of the slope and into a barn close by the entrance, where they were housed until the following day." (Biographical portrait of James J. Barrett, "Sixty-Three Years' Service," pp. 147-148, 158, May 15, 1932 issue of *The Delaware and Hudson Company Bulletin*)

On May 13, 2015, Connie Buberniak, Carbondale, reported to the author that "Uncle Tony Lisowski, as a young boy, younger than ten, worked as a mule boy in the mines in Scranton." Tony married Anna Baranauskas, whose sister, Bernice, was Connie Buberniak's mother-in-law.

The photograph of an "Underground Mule Barn" is from *Mining and Preparation of Anthracite The Fuel Supreme 1823 1929*, published by The Hudson Coal Company, Scranton, PA.



The mules are comfortably housed underground. The barns are illuminated electrically, and are well ventilated. The animals are under careful supervision of company veterinarian at all times

UNDERGROUND
MULE BARN

James Morpeth worked in several different capacities over the years at the Mill Creek breaker: driving a mule on the culm bank, door tender, nipper, and then mule driver. This we learn from the biographical portrait of the man in *The Delaware and Hudson Railroad Bulletin*, April 1, 1938, pp. 51-52:

"[He] was soon promoted again, this time to driving a mule on the culm bank, hauling cars of refuse from the [Mill Creek] breaker to the far end of the long pile a rock and slate nearby. Next he was sent down in the mines to tend a ventilating door. Fresh air was sucked down into the workings by a huge fan which forced air out of a ventilating shaft. To direct the air through the desired course in the mines, heavy wooden doors were used to block off certain passages. Door tenders were stationed at such points to open and close the doors when cars approached. For a time, too, he was a 'nipper,' the term applied to boys employed to lead unruly mules while the driver was busy coupling and uncoupling cars, throwing switches, and other work. / When James was thirteen [born 1865 + 13 = 1878] he became a mule driver in the mines, pulling empty cars into the chambers in which miners were working and removing loads to the 'passing branch' from which point they were hauled to the foot of the slope in trains of five cars. The mules, by their unpredictable conduct and viciousness taught many a man to swear, says Mr. Morpeth."

At the age of sixteen, James Morpeth became a laborer in the mines, loading coal into the cars after it had been blasted loose by the miner.

From the biographical portrait of James Morpeth, we learn the following very interesting facts about the housing of mules in slope workings and in shaft operations:

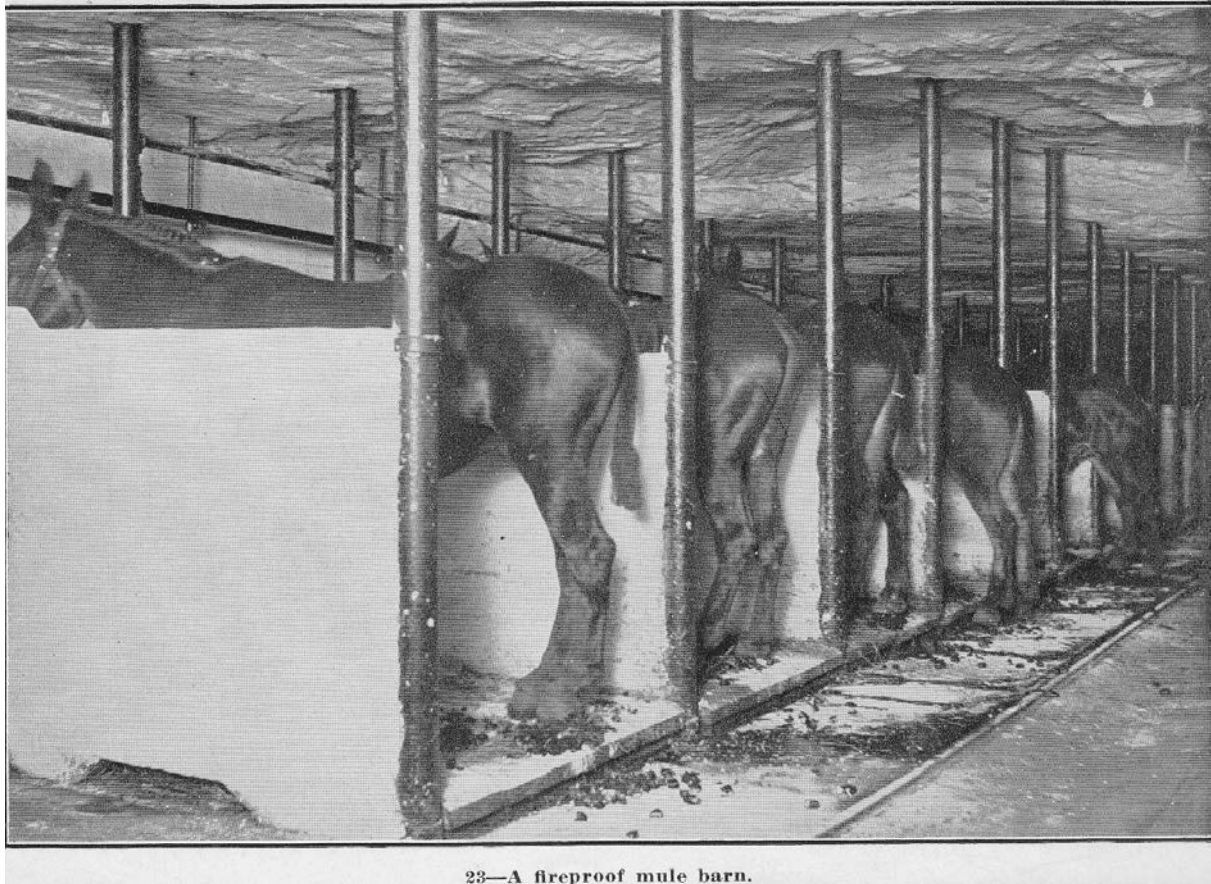
"Mules used in slope workings were usually driven out to the barns at night; those working at shaft operations were kept in underground stables except for intervals when the mine was idle."

One of the most remarkable descriptions of the barns for the mules underground is given by Vincent Lyons in "The Mule Barn" (McDonough's *Old Familiar Places*. . . , pp. 104-110):

"Before the advent of the electric locomotive (the 'motor') mine mules were the prime means of transportation in the pits, and driving mule—after tending door—was one of the first occupations of the mine worker. Every opening had a stable for its own mules and some had facilities for them in each vein. / The main mule barn [at Eddy Creek Colliery], though, was on the outside, on Line Street. . . / It was here that the mules were received from their long trip from Missouri here they were registered and named, and eventually assigned to one of the shafts or drifts of the colliery. These animals spent long years in the dark recesses of the mines, coming to the surface only when injured or sick, or when some crisis, such as a strike or the threat of fire or flood, arose. / The barn yard on Line Street covered about two acres and was surrounded by a ten foot fence. The fence, made of strands of wire from hoisting cable, and stapled to posts, made a durable enclosure, that no mule or horse, could hurdle. There were three buildings in the yard—the barn, the care-taker's or barn-boss's shanty, and a wagon shed. The latter was a lean-to, with

an opening in the front; it had neither windows or doors, but was open to the elements. A watering trough stood at the foot of a ramp near the main entrance to the barn. / The barn itself was two stories high, two hundred feet long and forty feet wide. It was built like the other company structures of one inch plank, battened by three inch by one inch boards, and painted red. It accommodated two hundred animals on the first floor; the second floor, the loft, was used exclusively for storing hay. In a room on the first floor were all the articles needed for the care and treatment of sick or injured animals; stock, slings, twitches, an assortment of medicines and powders. Another room contained harness, harness parts, wagon parts, etc.; another held feed: bran, oats, meal and corn. / The barn-boss was a man of many talents: veterinarian, harness maker, a barber and the person to consult when a cow, pig or dog became ill. . . / James 'Jim' Lynch was the day barn-boss, and as such was head man over all the barns and barn-bosses, inside and out. It was he who relayed the orders as he received them from the Scranton office, registered and named the mules, and doled them out as needed, to the various openings. . . He was kind and gentle with children and animals, and I never knew him to get angry or show impatience with kids, men or beasts. . . / Although we [the kids] would come and go into the shanty, we usually stayed outside unless one of our fathers was Jim's guest. A large pot-bellied stove stood in the center of the room, on a square piece of earth which was exposed when the floor boards were cut for its emplacement. The stove was a ponderous thing. . . / The chimney was a short one; but for some reason there was an awful lot of coal gas in the building, which would stifle a person coming from outside. Coal gas was not the only smell—there was also the heavy odor of tobacco smoke, the ordinary stable smells—new harness, blankets, medicine, liniment—and the overpowering smell of an antiseptic called iodoform. When my father, Mr. Philbin, Jim and his night-shift assistant, Tom Lynett of Providence, were sitting about conversing, there would be a cloud of tobacco smoke about three feet from the floor. This would undulate as a child walked under it and it was fun to see it wave and you moved about. / If a crisis arose necessitating the removal of the mules from the inside [of the mines], the yard would be crowded with animals, old and young, cranky and mild, small and large. Naturally, there would not be enough room in the barn for such an influx of mules, and most of them would remain in the open, where they were fed and watered and generally cared for by Mr. Lynch, and the inside barn-bosses: Paddy Maloney, John Rich McHale, and Tom Boland. Mr. Lynett watched after them at night, but after a lengthy spell of idleness the mules would become fractious and the more flighty among them would give trouble. When this occurred the kids kept clear of the yard. / During the summer of 1922 when the strike idled all the mines in the Anthracite fields, the mules confined to the Eddy Creek barnyard became more and more restless. . [On one occasion, when a wagon driver failed to properly close the gate to the mule yard, 350 mules got out and stampeded through Smoketown. Fortuitously—and apparently without guidance from those who pursued them—the mules ultimately ran back into the mule yard through the still-opened gate.] . . . / Having the mule barn on our street had its advantages: it was there in the spring that we obtained hay seed for the lawn, and manure for the garden; it was there we got that flesh-searing liniment for our bumps and bruises. In the winter heavy storms

did not hamper us, because after the snow fell the street would be plowed from curb to curb for its entire length, by Mr. Willis Winfield, the teamster, who drove a team of matched bays for the company. . . / The snow-plow as a squat, V-shaped thing resembling a lopped-off and hammered-down ship's prow. It would be attached to the rear of the sleigh and dragged along behind it, drawn by a team of bays, with old Willis, a fat and jolly Yankee from Peckville, standing on the plow to give it weight. If the snow was heavy other men would ride the plow with Willis, with additional weights of T-iron rail and car couplings to bear it down. . .”



"A fireproof mule barn," photograph in the collection of the Carbondale Historical Society.

Nick Mattise, Jermyn, PA: "On the Mattise farm in RD Jermyn, where there were over 1,000 acres of farmland, there was a mule barn."

The Department of Mines established very specific guidelines for the placement and construction of mule barns in the mines as well as the conditions which must prevail therein:

"1916 Annual Report of the Department of Mines, Article XXXIII: Inside Stables and Buildings / Section 610. No horse or mule stable shall be provided inside of any mine, unless the space

occupied thereby is excavated in solid strata of rock, slate or coal. If such excavation is in the coal seam a wall shall be built of brick, stone or concrete not less than eight inches in thickness along the face of the coal from the bottom slate to the roof or the face of the coal shall be entirely cased in with incombustible material. In the construction of said stable wood or other combustible material shall not be used except for a floor where the animals stand. / Section 611. No hay or straw shall be taken into any mine unless pressed into bales and be kept in a store-house built apart from the stable and in the same manner as the stable. Under no circumstances shall hay or straw be stored in the stable. No open lights shall be used in any stable, store-house, or at any other place in the mine where the hay or straw is handled. / Section 612. The air current used for the ventilation of a stable shall not be intermixed with the air current used for ventilating any other portion of the mine. / Section 613. All buildings inside including engine houses, pumphouses, stables, et cetera, shall be built of incombustible material approved in writing by the inspector. / Section 614. The enforcement of this article is charged to the mine foreman and any mine foreman who fails or neglects to enforce compliance with the provisions of this article shall be guilty of a misdemeanor, and upon conviction, shall be punished by a fine of not less than fifty dollars or more than one hundred and fifty dollars, at the discretion of the court.”

A reporter for the *Scranton Times* visited the mines in 1887 and reported the following very interesting facts about mules in the mines:

“A VISIT TO THE MINES. / What a Scranton ‘Times’ Reporter Saw in the Bowels of the Earth. / . . . Arriving at the mule barn, the barn boss gave many interesting pointers regarding ‘the power behind the throne’ as he called the mule. From him was learned that there are fully 3,000 of those animals in the mines and outside in Scranton and it takes 3,000 boys and men to attend to them. Each mule consumes 12 ½ pounds of feed and pounds of hay per day. They cost from \$150 to \$200 each, and are purchased mostly in Kentucky, Tennessee and the Carolinas, but the best come Northern Missouri. The oldest mule works at the Hampton mines. Though the average life of a mule is five years, some have been known to live 25 to 30 years. They are taken out of the mines when not at work, and allowed to enjoy the happiness of the upper crust thus giving them an occasional vacation, which they thoroughly relish. There are some of them very fierce, and the blacksmith that attends to their wants says they are so tricky and agile that it requires considerable study to save himself from them. One he was shoeing the other day was extremely wicked. It lost a shoe off the right front hoof, and as he tried to put one on, it kicked him with its hind leg and at the same instant bit him on the head. ‘They ain’t no slouches are they.’” (*Carbondale Leader*, January 15, 1887, p. 4)

At the seminar/presentation on January 25, 2007 by the author on *Working Horses and Mules on the D&H*, Tom Klopfer, Archbald, PA, author of *The Anthracite Idiom*, shared with us the entry for "mule barn" in *The Anthracite Idiom*, as follows:

"mule barn—the quarters and large corral for the animals at a COLLIERY. Mules were often kept underground for long periods of time. If a strike were anticipated they would be brought to the surface as happened in the strike of 1925 when 50,000 were allowed above ground. The animals were known to be very temperamental when at time they would perform only a single task or respond to a particular driver. The poor beasts were subject to accidents just as the miners were. Sixty-four were destroyed in a fire at the Temple Coal Company in Carbondale in 1905 [underground mine maps for the Temple Coal Company in the archives of the Carbondale Historical Society], others were killed by runaway cars hurling [hurtling] down a mine slope. On July 14, 1932 a large mule barn of the Quinn Coal Co. near Avoca suffered \$5,000 in damage from a fire. Rats also made their lives miserable. / Mule Vocabulary: "gee" - turn right/ "wah-how" - turn left / "whoa" - stop / "giddap" - proceed. / [song] 'My Sweetheart Is the Mules In the Mines' "

Working underground was dangerous, not only for the men and boys but also for the mules that worked with them. In 1883, two mules were killed in a fire that broke out in the Marvine shaft near Providence:

"Two Mules Roasted Alive. / The mule barn at the Marvine shaft, near Providence, was destroyed by fire about eleven o'clock last night. A lot of baled hay was stored in the barn, which was destroyed, together with two mules. There were five mules being stabled there, but William Armsell succeeded in getting three of them out, and was endeavoring to untie the other two when they began rearing and jumping violently from the near approach of the flames, and was forced to leave them to their fate to be roasted to death. No explanation is given of the origin of the fire.—*Scranton Times* of Monday." (*Carbondale Advance*, October 13, 1883, p. 3)

In 1887, a man named Patrick Horan attempted to blow up the mule barn at the Hillside Coal & Iron Company at the Erie breaker in Mayville (now called Mayfield):

"A bold attempt was made to blow up the mule barn of the Hillside Coal & Iron Co. at the Erie breaker in Mayville, on Saturday night. A man named Patrick Horan, of the Fourth ward, in this city, had lately made threats to destroy the property of this company, and as he had gone down the valley and was on the war path on Saturday it was thought prudent to have a special watch, consisting of Supt. Walker, John B. Davis, Jas. Walker, John Riley, Lon Adams, stationed at various points to guard the premises that night. About 11 o'clock, Supt. Walker, looking from the barn window, saw Horan jump the fence, gather the shavings and chips from the new addition being built, and place them in a pile against the barn, placing a dynamite cartridge with a long fuse in the chips. Before he had time to set fire to it, Supt. Walker had signalled two of his guard and they closed upon Horan. He attempted to escape but one shot from Supt. Walker's revolver, which just grazed Horan's shoulder, brought him to submission, and he was arrested and taken to Scranton, and committed to the county jail. The barn which he attempted to destroy contained about fifty mules, besides hay, grain, &c. Horan bears a reputation of a desperate character." (*The Journal*, November 10, 1887, p. 2)

In 1888, when the mule barn at the Northwest Coal Company at Simpson burnt, fifteen mules were killed in the fire:

“The mule barn of the Northwest Coal Co., at Simpson, two miles north of this city, was destroyed by fire on Friday morning, and fifteen mules perished in the flames. The fire originated from the stove.” (*The Journal*, April 19, 1888, p. 3)

Not surprisingly, a strong bond developed between most of the men and boys who worked in the mines and the mules that worked with them. At the time of the 1942 flood in the Lackawanna and Wyoming valleys, seven mules were trapped in the Motley Coal Company mine at Mayfield. Here is the newspaper account of the astonishing—and heartwarming—account of the rescue of these seven mules by the men who worked with them in the mines:

"Rescuers Float Raft for Mile in Mayfield Mine to Save 7 Mules Trapped 10 Days by Flood
by James Beamish / One of the most thrilling sagas of anthracite mining was unfolded yesterday when rescue crews at the Motley Coal Company, Mayfield, floated on 12 feet of water for more than a mile underground to reach seven mules imprisoned in a subterranean barn for the past 10 days. / The move for the rescue began Saturday morning, May 23, when Joseph A. Motley and Sandy Consagra, operators of the Motley mine, discovered that flood waters from the Lackawanna River and its tributaries were rushing into the mine. A survey showed that water had reached a depth of 12 to 18 feet. Joseph Perri, a foreman, happened along. 'How can we save our mules?' he asked. 'I was wondering about that all morning,' replied Motley, 'they have food enough for several days but how will they be?' Will the pumps keep the air coming to them and will the barn remain free of water?' / Miners gathered around the operators for a conference. A dozen hands went up as volunteers were called. That day and for the every day the following week, efforts were made to reach the isolated mules. / Plans were made to secure a diver who would make the dangerous trip through more than a mile of underground passages, past a labyrinth of chambers. / Veteran miners scoffed at this plan. 'How would a diver be able to carry fresh oats and other food to the mules without having the supply soaked in water?' 'How will the diver be able to handle the mules after he does reach them? His suit will scare them and, besides, he won't be able to handle them.' The plan was discarded; Consagra, Motley and Perri then agreed upon floating a specially constructed raft to rescue the mules. Carpenters began work on the raft and it was ready for trial trips Tuesday. / Perri, Joseph Walker and Sandy Gratia, miners, loaded oats and other food on the raft, donned hip-boots and with the aid of long poles and searchlights started off on their mercy mission 60 feet below the surface. / Three hours later they reached the stricken animals. Braying of the mules could be heard for some distance before the rescuers reached the barn. / Names of the mules in the barn are: Steve, Clavert, Bones, Tony, Fanny, Pete and Tim. Maggie, another mule, who was placed in a small barn some distance away was drowned. / **WILL NEVER FORGET SIGHT** / 'It was a sight I'll never forget to my dying day. Pete began to dance up and down and got the others doing the same. Calvert and Steve reached out and licked our hands,' Perri said. / 'Don't say a mule is dumb. They're the best

working animals in the world and the smartest ones, too. We petted them and talked to them and they just stood there. They began to cry in a funny little way. Just like folks who are overcome with happiness. We felt like crying ourselves. / Then we began to feed 'em. We told them we could only give them a little at first as they had been away from food for a long time. They seemed to understand what we were saying.' / 'At first we fed them lightly. Then we sat around an hour or two and fed them again. Then we left some food around for them. / 'We found out,' Perri explained, 'that water had been about two feet deep in the barn and that what food was there had been washed away. They had no food in at least nine days. They hadn't had any sleep, either, as their eyes showed it. / **ONE MULE DROWNED** / 'But one good thing was that the pump had been working and that lights were still on. If the pump had knocked off, they probably would have suffocated. When the mines were opened, it was a good thing that the barn was placed high and dry or else all of them would have been lost,' he said. / Plans have been made to visit the mules regularly each day and feed them. Other care, as needed, will be given to them on these trips. The raft is ready for any emergency and progress is being made to free the mine workings of water. / Just as soon as the water is removed, the courageous mules are to receive a vacation. They will be led from the mine out into the sunshine. And this will be some vacation, too, as the mules have lived in the mines more than two years. They earned their trip to the surface, the mine workers agree, because, as mules come, they're worth their weight in gold."

In order to maximize the amount of work that mules could do in the mines, they had to be properly fed and watered. On the question of how to properly feed and water mules, we read the following in the *McGraw-Hill Coal Miners' Pocketbook*. . . , pp. 775-76:

"Feeding Mules.—Mr. W. H. Hughes, gives the average daily ration at an English colliery for 80 horses averaging 15 hands high, the figures covering a period of 8 yr., as follows: Grain, 7.25 lb.; bran, 9.25 lb.; hay, 18.75 lb.; total, 35.25 lb. The grain was composed of beans, 3 lb.; maize (corn), 2.75 lb.; and oats, 1.50 lb. The last item was hay, 14 lb.; clover, 1 lb.; and straw, 3.25 lb. / The American mule appears to be fed about two-thirds as much as the English horse. . . / In the anthracite regions of Pennsylvania, the average ration for mules from 1,000 to 1,200 lb. in weight is 12 lb. of grain and 15 lb. of hay. The composition of the grain varies from two-thirds cracked corn and one-third oats, to equal proportions of each. Corn is richer in fat-producing elements than oats and is fed to give strength, but too much grain will cause acute indigestion, paralysis of the walls of the stomach, and usually results in death. A feed of bran once a week is recommended as a laxative; also a handful of pure coarse ground salt twice a week. / Mules should be fed three times a day, although some large companies feed but twice daily. On idle days, the food allowance must be reduced 25 to 30%. Hay is digested chiefly in the intestines and grain in the stomach, hence, if possible, a mule should be first watered, then given hay, and lastly grain. If the water is given last, it washes the food into the intestines before it is acted on by the gastric juices in the stomach. If the hay is given after the grain, it carries the grain with it into the intestines. This order of feeding is not always practicable in a mine and it is of advantage to place watering troughs about the mine so that the mules can be watered during the day while

at work. As the feed is in the boxes when a mule is put in the stable at night, there should also be water in his water trough so that he can drink at intervals while feeding. Fresh food should never be placed on top of any left over from the previous feeding. A mule should have plenty of water the first thing in the morning, and care should be taken to have the water pure and the troughs clean.”

A large quantity of oats was required for these mules and horses that worked for the D&H as well as for the horses and mules in the communities through which the D&H transportation system passed. Not surprisingly, newspaper ads for large quantities of oats are regularly seen in *Northern Pennsylvanian* and *Dundaff Republican*, and *Canal and Rail Road Intelligencer*, beginning in the early 1830s, as well as in other newspapers:

“Wanted. / Two Thousand Bushels of / OATS / for which the highest cash price will be paid by the subscriber, to be delivered at the branch of the Rail Road, about 3 miles from Canaan Corners. / **WARREN DIMOCK /** Canaan Sept. 25th, 1830 3” (*Dundaff Republican*, and *Canal and Rail Road Intelligencer*, January 26, 1830, p. 3)

“Wanted. / 500 Bushels of OATS, for which a fair price will be paid in trade at our store. / **Grant & Wood /** Carbondale, Oct. 10, 1834 (*Northern Pennsylvanian*, Friday, October 10, 1834, p. 3)

The horses and mules owned by the D&H and the Pennsylvania Coal Company consumed an enormous amount of hay annually. In 1882, it was reported in the *Honesdale Citizen* that they consumed 2,600 tons of hay annually:

"The horses and mules owned by the Del & Hud Canal Co. consume every year 1,800 tons of hay, and those of the Pa. Coal Co., 800 tons." (*Honesdale Citizen*, August 17, 1882)

In addition, in order to maximize the amount of work that mules could do in the mines, not only did they have to be properly fed, they also had to be properly cared for. On the question of the care of mules, we read the following in the *McGraw-Hill Coal Miners' Pocketbook*. . . , pp. 776-777:

“Mine mules should have clean comfortable quarters, with pure water and food. Their feet and legs should be washed every night and their hocks dried; and they should be combed regularly. Extreme care should be taken that they are shod properly, and a competent shoer is imperative at mines where many mules are used. If the mine is too small to warrant the constant employment of a veterinarian, arrangements should be made for one to visit the stables monthly to look over the stock, paying particular attention to their feet. / The stable boss or mine foreman should inspect the harnessing of the mules before they begin work. All parts of the harness must fit properly, particularly the collar, which transmits the weight to the mules' shoulders; the hames, to which the traces are attached, should bear evenly upon the collar. The traces should be of

equal length and free from knots; many insert a coiled spring between the trace and the car to take up the jar of starting. / Mules should not be worked more than one shift per day, and if overtime is necessary, should be given a chance to rest the next day. If stabled underground, they should, unless the expense is prohibitory, be brought to the surface from the close of work Saturday until Monday morning. This procedure is not only humane, but the fresh air with the chance to run and roll in the pasture and to nibble at the fresh grass, keeps the animals in health, adds to their efficiency, and prolongs their life. / Estimates of the length of the working life of mine horses and mules vary so widely that it seems impossible to give an average. Mr. Hughes, quoted before, gives the average useful life of horses working in English mines as more nearly 9 than 8 yr. This figure is based on 13 yr. experience at some large collieries and should be considered authoritative. Mules seem to have a much shorter working life than horses. Mr. Bowron assumes the average working life of a mule in the mines of the Birmingham, Alabama, district, to be 6 yr. The records of the Fairmont Coal Co. for 1905, show that in that year, 26% of their stock either died, was killed, or had to be disposed of on account of being crippled or worn out. This shows a working life of between 3 ½ and 4 yr. In estimating the cost of mule haulage it is probably well to count on the life of a mule as 5 yr., and that 10% of the stock is in the stables either sick or temporarily disabled."

Even with the best feed and the best of care, however, horses and mules sometimes got sick, which is to be expected. But in 1872, something completely unexpected and unprecedented took place in North America--an epizootic outbreak of equine influenza broke out. This outbreak has been described as "the most destructive recorded episode of equine influenza in history," and was known widely as "The Great Epizootic of 1872".

The census of 1870 counted 7.1 million horses and 1.1 million mules (as well as 39 million humans). Most of the horses and mules in America at the time were incapacitated by influenza for a week or two. About 1 percent died, the rest fully recovered.

An 1872 report on equine influenza describes the disease as: "An epizootic specific fever of a very debilitating type, with inflammation of the respiratory mucous membrane, and less frequently of other organs, having an average duration of ten to fifteen days, and not conferring immunity from a second attack in subsequent epizootics."

The first cases of the disease were reported from Ontario, Canada. By October 1, 1872, the first case occurred in Toronto. All the street car horses and major livery stables were affected within only three days. By the middle of October, the disease had reached Montreal, Detroit, and New England. On October 25, 1872, *The New York Times* reported on the extent of the outbreak, claiming that nearly all public stables in the city had been affected, and that the majority of the horses owned in the private sector had essentially been rendered useless to their owners. Only days later, the *New York Times* went on to report that 95% of all horses in Rochester, New York, had been affected, while the disease was also making its way quickly through the state of Maine and had already affected all fire horses in the city of Providence, Rhode Island.

On October 30th, 1872, *The New York Times* reported that a complete suspension of travel had been noted in the state. The same report also took note of massive freight backups being caused by the lack of transportation ability that was arising as a result of the outbreak. Cities such as Buffalo and New York were left without effective ways to move merchandise through the streets, and even the Erie Canal was left with boats full of goods idling in its waters because they were pulled by horses. By November, many states were reporting cases. The street railway industry ground to a halt in late 1872.

Boston was hard hit by a major fire downtown on November 9-10 as firemen pulled the necessary firefighting equipment by hand. Seven hundred buildings were destroyed. In New York, 7,000 of the city's approximately 11,000 horses fell ill, and mortality rates ranged between 1.0% and 10%. Many horses were unable to stand in their stalls. Those that could stand coughed violently and were too weak to pull any loads or support riders. The vast majority of affected horses—save for those 10% that died as a result—were back to full health by the following spring. The height of the plague was December 14, 1872.

Every aspect of American transportation was affected. Locomotives came to a halt as coal could not be delivered to power them. Trains and ships full of cargo sat unloaded. Horse drawn tram cars stood idle and deliveries of basic community essentials were no longer being made.

The outbreak forced men to pull wagons and carts by hand. Horse drawn fire carts had to be drawn by people.

In early November 1872, the horse epidemic reached Honesdale:

"The Horse distemper has made its appearance in Honesdale and vicinity, although in a varied form. About one third of the horses on the Del & Hud Canal are affected, interfering greatly with coal shipment." (*Wayne Citizen*, November 7, 1872)

The horse epidemic reached Carbondale in mid-November 1872, and all aspects of life were affected. The Gravity Railroad was closed for three days; the Clifford stage did not run. The effect of the epidemic in Carbondale is described well in the article that was published in the *Carbondale Leader* on November 16, 1872, p. 3:

“THE HORSE EPIDEMIC.—The terrible horse disease that has been raging in almost all parts of the country of late, reached this city last Saturday. Mr. Durfee found two of his horses sick and coughing on Friday evening of last week, and immediately began preparing for the disease. Extra precautions were taken, the horses kept blanketed, the stables kept clean, and a little medicine given once in a while. Saturday morning he had six on the sick list, and on Monday the whole number of sixteen or seventeen were unable to work. As soon as he found the disease had come, he refused to let any of his horses go out of town. Tuesday was a dark, rainy day, and the bus did not run to the depot to all the trains. With good care it is thought that that the disease will

soon run its course, and all the horses be saved. / All the horses in Mr. Briggs's livery stable are sick, and the Honesdale stage has not been running at all this week. On Monday the mail was brought over with one horse. Some of the time, we understand, it has been carried by hand. The passengers to and from Honesdale have either been obliged to walk or ride on the gravity road, for the past week. The gravity did not run during Tuesday, Wednesday and Thursday. So the communication between here and Honesdale has been very poor indeed. / The Clifford stage has not been running during the week. The last trip was made on Saturday. The mail has been carried by hand. / There has been considerable sickness among the Company's horses and mules in this vicinity. / Mr. John Jermyn, of Gibsonburg, has a large number sick." (*Carbondale Leader*, November 16, 1872, p. 3)

In November 1872, there were blockades on the D&H railroad and canal related to horse epidemic. At the same time, every D&H mule in Providence was down with equine influenza:

"Last week there were 2,000 loaded cars blockaded on the Del & Hud Railroad, between Honesdale and Carbondale, owing to the break on the canal and the hippo-grippe." (*Wayne Citizen*, November 21, 1872)

"Every mule in Providence belonging to the Del & Hud Canal Co is down with equine influenza." (*Wayne Citizen*, November 21, 1872)

The epidemic continued through November, with some horses and mules now recovering, however. The Durfee omnibuses were again running to each train. The Honesdale and the Clifford stages, however, were not yet running. Many of the mines were only running partially, some not at all.

“THE SICK HORSES.—The horse epidemic still rages in this city and vicinity, although it has been of a mild character so far. Horses that have been well taken care of and not worked are doing well; but those who have continued working their faithful animals through thick and thin, and have not taken proper precautions against the disease, have found that they have not done that which was for the best. Some owners of horses who have had plenty of work for them to do, have, when the weather has been pleasant, taken them out and worked them a short time in the middle of the day. Others, who have looked at the matter in the right light, have kept their animals in the stables, and taken care of them. / Mr. Durfee's horses are thought to be nearly well, and he has commenced letting them again on short trips. The omnibus is now run regularly to every train. The horses in the stables of Mr. Briggs are said to be doing well. The Honesdale stage has not been running for the past two weeks. The mail has been carried over the gravity

road the most of the time. The Clifford stage is not running yet, the mail being carried by hand. / The horses and mules of the D&H C. Co. at this place are affected to a certain extent. We understand that the mules employed in the Cold Brook mines were all sick on Thursday morning, and the mines are now idle. / The Company's mines down the valley are either being worked partially or not at all. It is thought that the disease will gradually disappear, and that we shall not be troubled for want of horse help in the course of a week or two." (*Carbondale Leader*, November 23, 1872, p. 3)

Two thousand loaded coal cars were blockaded on the Gravity Railroad because of the epidemic, as well as a break on the canal:

"The *Wayne Citizen* says there were 2,000 loaded cars blockaded on the D. & H. gravity railroad, last week, between Honesdale and Carbondale, owing to the break on the canal and the horse epidemic." (*Carbondale Leader*, November 23, 1872, p. 3)

By the end of November, 1872, mercifully, the worst stage of the epidemic had passed in Carbondale. The Honesdale and Clifford stages were again running. Fewer ox teams were seen than earlier in the month. Things began to get back to normal:

"The number of sick horses has so much decreased since last week, that the usual business activity in our streets has returned. But few ox teams are used in comparison to a week ago. The Honesdale and Clifford stages commenced running again on Monday. The mules employed in the mines are said to be nearly all doing well. It is thought that the worst stage of the disease has passed." (*Carbondale Leader*, November 30, 1872, p. 3)

Pink Eye among the Horses

In May, 1882, pink eye made its appearance among the horses on the D&H Canal:

"The pink eye made its appearance among the horses on the D & H Canal, and some of the boatmen have been compelled to tie up until their animals recover." (*Honesdale Citizen*, May 18, 1882)

Mule with Malaria

In June, 1883, a D&H canal mule was afflicted with malaria.

"We learn of a D & H Canal mule which is afflicted with malaria. It has chills and fever regularly and displays all the symptoms of the disease. It is fed quinine with its oats and is improving." (*Wayne Independent*, June 14, 1883)

In July, 1883, many of the boatmen on the D&H Canal and their horses and mules showed symptoms of malarial poisoning.

"Many of the boatmen on the D & H Canal are suffering from chills and fever, from some undiscovered cause. Quinine has gotten to be a portion of the regular stock of supplies laid in by boatmen. Many of the horses and mules also evince symptoms of malarial poisoning." (*Honesdale Citizen*, July 12, 1883)

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Facts of Interest about Horses and Mules and Railroads

Standard Gauge

Gravity gauge, as we know, is 4 feet 3 inches (see pages 111-114 of Volume I in this series). Standard gauge is 4 feet 8 ½ inches.

But many other gauges of rail lines were used on early railroads in America, as we learn from the article titled "The Battle of the Gauges," that was published in the December 1, 1934 issue (pp. 181-83, 188) of *The Delaware and Hudson Railroad Bulletin*.

From that article, we learn that in America in 1837 there were at least seven different track gauges on American railroads, many of those gauges fixed by laws of the various states. The distance between New York and Washington, for example, was initially spanned by a series of non-connected rail lines, whose trains ran independently of each other. Passengers frequently had to change cars many times in the course of a journey because of non-connected rail lines and different gauges. From a study of *Ashcroft's Railway Directory* for 1867, it has been determined that as late as 1866 there were no less than 12 different railway gauges in use in the United States.

Beginning in 1860, when the D&H Gravity line was extended southward to Providence, the D&H began installing three rails in its trackage, making it possible for Gravity-gauge cars and standard-gauge cars to run on the same tracks.

In the article titled "The Battle of the Gauges," we read:

"The steam road built by the Delaware and Hudson to connect its more distant mines with the terminus of the Gravity at Carbondale, was built to standard, 4 feet 8 ½ -inch gauge, three rails being used so that trains made up of equipment from both roads could be hauled in the same train."

Things got complicated, as we will demonstrate in Volume XII in this series, when the D&H leased the Albany and Susquehanna,* which was a 6-foot gauge line.

*"The formal opening of the Albany and Susquehanna Railroad, from Albany to Binghamton, took place on Tuesday . . . The Railroad is 140 miles in length and opens up a rich and beautiful agricultural region. / . . . The grade of the road is very favorable for the transportation of heavy freight in either direction. The heaviest grade in going toward the Hudson is said to be fifty feet per mile." *Carbondale Advance*, January 16, 1869, p. 3)

The Gauge of the Pacific Railroad Becomes Standard Gauge:

Virtually all southern railroads had 5-foot gauge; by state law, California railroads also had 5-foot gauge. Gauges on some northeastern Pennsylvania and New York railroads: Albany & Susquehanna, DL&W, Erie—all 6 foot; Lackawanna & Bloomsburg, 4 foot 8 ½ and 6 foot.

When the U. S. government decided to build a railroad to the Pacific, a congressional act was passed, in 1862, which authorized the President of the United States to fix the gauge of the Pacific road. President Lincoln chose 5 feet. The President's ruling was not accepted. The quarrel was transferred to Congress, which, in March 1863, passed a law naming 4 feet 8 ½ inches as the gauge of the Pacific Railroad. The declared government standard soon became virtually universal in the United States.

On this question of standard gauge, we read the following in *Track and Roadway*, published by The Delaware and Hudson Railroad, n. d., p. 86:

"In March 1863 [Congress] passed a law naming 4 feet 8 ½ inches as the gauge for the Pacific Railroad. / It is very likely that this action, more than any other event in railroad history, was the determining factor in establishing the prevailing standard railroad gauge. All the roads in the country not built in accordance with the decision saw the necessity of track alteration if they were to participate directly in transcontinental traffic and enjoy its benefits. The necessary physical transformation began almost at once, and continued until the declared governmental standard became universal."

In *The Delaware and Hudson Railroad Bulletin*, May 1, 1933, p. 77, there is a very interesting article titled "The Why of Standard Gauge." From that article we learn about the direct connection between the Imperial Roman army's unit of distance, the pace, or double stride (left-right-left), standard gauge on American railroads, and horses. Here is that article:

“The ‘Why’ of Standard Gauge / Roman Soldiers, Who Never Heard of Railroads, Set Present Track Span / Have you ever wondered why the standard gauge of railways should be 4 feet 8 ½ inches? It is a curious figure; it does not fit in exactly with yards or feet or inches; nor has it anything to do with the metric system. Yet 4 feet, 8 ½ inches is the gauge of most of the world’s important systems, according to a writer in the Philadelphia *Evening Bulletin*. / The question of the railway gauge has formed a puzzle for nearly a hundred years. When Stephenson was asked by the Railway Gauge Commissioners why he had adopted 4 feet 8 ½ inches for his first railways, he replied that that was the gauge of most of the tram railways in the Newcastle Colliery district. But neither he nor anybody else knew why or when the old tram railways had adopted it. / Recently the true explanation has been found, and it shows that the standard gauge goes back for at least 1,800 years in England, whilst in other countries its history can be traced hundreds of years further back. / Before the coming of the steam engine, colliery wagons were hauled by horses over rails made sometimes of wood, sometimes of stone, and occasionally of metal. It was clearly an advantage for Stephenson to make his steam railways of the same gauge. The first built were for colliery work, and the old vehicles could still be used. But why was this gauge of 4 feet, 8 ½ inches the traditional gauge for trucks used in connection with mines found all over the north of England? / The explanation came to light during excavations of parts of the Great Wall built 1,800 years ago by the Emperor Hadrian from the Tyne to the Solway Firth. Chariot tracks were found in many places, and when these were measured it was discovered that the distance from wheel to wheel was 4 feet, 8 ½ inches. And then the true explanation came to light. / The Roman army’s unit of distance was the ‘pace,’ or double stride—left-right-left. The Roman mile was a thousand paces. We know its exact length, since many of their milestones remain; from this it was found that the pace is 4 feet, 8 ½ inches. / All Imperial Roman army chariots and all military vehicles were made with a standard track of one pace, or 4 feet, 8 ½ inches to facilitate the building of roads and causeways. [Many people believe that the track of the Imperial Roman war chariots was made feet 8 ½ inches wide in order to accommodate the back ends of two war horses.] / The Romans, we know, worked lead and iron mines in the north of England, and some of their mines were still being worked in Newcastle district in Stephenson’s time. For haulage they used military wagons, and to make the passage of these easy over soft ground, they laid down tracks made with slabs of stone measuring 4 feet, 8 ½ inches from center to center. Similar tracks of the same width were found in Pompeii and Herculaneum. / Perhaps the most curious part of the whole story is the influence exercised by the Roman soldier’s pace on the subsequent history of our railways. It almost seems as though the ghosts of those who first built the great roads of this country determined that the old gauge should be maintained. / ‘Many attempts have been made to depart from the standard gauge, but none has succeeded, although a wider gauge would clearly make for more comfortable travel and greater speeds. The Great Western Railway adopted a gauge of 7 feet over all the important parts of its system, and it was in use for many years. But not a yard remains. It may, in fact, be said that the Roman soldier stepped out the railways of the world,’ concludes the article.”

Horseshoe Machine

There were a great many working horses and mules in the mines and on the railroads in America in the nineteenth century, and there were even more working horses and mules out there in America at the same time. Where did all the horse shoes come from? A great many of them were made at the forges that were everywhere in America at the time.

But countless numbers of horse shoes were also made using the horseshoe machine that was patented on November 23, 1835, by Henry Burden, a Scottish immigrant, of Troy, NY. This machine could produce 60 horseshoes a minute. In the Civil War most of the shoes for Union cavalry came from Burden's plant in Troy.

Advertisements for horse and mule shoes are frequently seen in nineteenth-century newspapers. Hunt Brothers & Co., Limited, Scranton, PA, placed an ad in the January 12, 1878 issue (p. 4) of the *Carbondale Advance* for (1) all sizes of Perkins' Horse and Mule Shoes, (2) three kinds of horse nails (Vulcan, Putnam, and Globe), and (3) Swedish steel toe calks.

Here is that ad:

HUNT BROTHERS & CO., Limited

DEALERS IN



Perkins' Horse & Mule Shoes, all sizes

VULCAN HORSE NAILS,

PUTNAM do. do.

GLOBE do. do.

— AND —

Swedish Steel Toe Calks.

HUNT BROTHERS & CO., Limited,
Scranton, Pa.

Accidents Involving Horses and Mules

To work on the railroad or in the mines in the nineteenth century was a dangerous occupation, and everyone who worked there knew it. In spite of the best efforts of the coal companies and the railroads to prevent accidents, accidents did happen, which should surprise no one. Given the number of horses and mules that worked on the railroad and in the mines, it is not surprising that accidents involving horses and mules did take place.

A "melancholy" accident took place on the high work of the D&H in Carbondale in January 1849, possibly on Level No. 1, when the horse pulling a cut of empty coal cars stepped upon the loaded track, which caused a collision in which Charles Rogers, the driver of a cut of loaded cars, was accidentally killed by the forward car of the cut of loaded coal cars:

“Accident and sudden Death. / A melancholy accident occurred upon the high work of the Railroad at this place, on the afternoon of yesterday. *Mr. Charles Rogers*, a Driver, coming forward at the branch with a loaded train upon being met by the empty train the horse attached to the latter stepped upon the loaded track and produced a collision which threw him from his board upon which he was standing, across the rail. The forward car of his train immediately passed over him about the chest, causing inward and mortal wounds. He was immediately removed to his residence, but expired in the early part of the evening. He was about 24 years of age, and leaves a wife and one child.” (*Carbondale Democrat*, January 19, 1849, p. 2)

In June 1858, near one of the D&H shop buildings, a horse and wagon that were not properly tied up took fright and ran into town. On its race through town, it was joined by another horse before a Fish Wagon and the two runaway horses continued their race through town, causing much damage as they did so. Here is the account of their journey that was published in *The Advance*:

“Accident. / On Tuesday, one of the Company’s horses, attached to a wagon, near one of the Shops, took fright at lifting the body off, and ran down John Street and under the Rail Road on to Foundry St., up Foundry St. to garden of J. M. Poor, where he left the running gear of the wagon in pawn for the damage done the fence, and continued on to Main St., down Main to Dundaff St. and thence round into the west end of the Barn on the old Lackawanna Hotel property. / A horse before a Fish Wagon standing at the ‘*Hole in the Wall*’ joined the race, crossed through the Marble Yard, making a ‘*doleful sound*’ over the unfinished tomb stones, and leaving fish and early vegetables on deposit, continued on till he smashed up against the door of the barn. The race was nearly equal, as the horses met about midway of the barn. / The practice of leaving horses untied, or improperly tied, is the fruitful cause of seven-eighths of all runaways we have.” (*The Advance*, June 26, 1858, p. 3)

In 1861, John Garry, was killed while unhitching a horse from railcars in motion, the horse whirling around against him and throwing him across the track under the cars:

“Afflicting Accident. / JOHN GARRY, for many years employed upon the Railroad here, met with a fatal accident on Wednesday afternoon. While unhitching a horse from Cars in motion, the horse whirled round against him and threw him across the track under the cars, inflicting injuries with resulted in his death in a few hours. He was about 26 years of age, and much esteemed.” (*Carbondale Advance*, October 12, 1861, p. 2)

There were, it appears, some engineers who worked for the Delaware and Hudson Canal Company (and probably many other railroads as well) who deliberately blew off steam or blew the whistle of their engines in order to frighten horses nearby and thereby "to see a little fun." This "foolish habit," as it is appropriately referred to by the writer of the notice given immediately below, was surely not common practice among D&H engineers nor among the engineers on other rail lines.

“Engineers who are in the foolish habit of blowing off steam, or blowing the whistle of their engines in the vicinity of the depot, when they see frightened and fractious horses, would show a little more decency and common sense if they would desist from this habit. A number of horses have been frightened by engineers on purpose to see a little fun. It is a very dangerous habit and when some horses become frightened, a great deal of damage is done to property, if it does not endanger the lives of persons, which it often does.” (*Carbondale Leader*, December 7, 1872, p.3)

In 1873, James Farrell, a 16-year old boy who went to help a driver of a mule in the new mines at the Lackawanna Breaker that would not pull, was kicked by "a vicious mule" and died as a result of the kick from the mule.

“On Monday a boy named James Farrell, aged about sixteen years, was kicked in the stomach by a vicious mule in the new mines at Lackawanna breaker [in the Carbondale yard]. It appears that the mule would not pull, and the boy went to help the driver of it, when it kicked him with a force sufficient to knock him senseless. He was taken home, and medical aid procured, but to no avail. He died on Tuesday.” (*Carbondale Leader*, March 29, 1873, p. 3)

What a tragedy. The Good Samaritan gets killed. Mules are not vicious by nature. Why was this mule "vicious"? Had it been abused by its current driver or a previous driver? Was it properly cared for? Had it been fed and watered before going to work? Was the load that it was being directed to pull too heavy? Was the driver asking too much of the mule?

Another railroad engineer or fireman, this time in the *Major Sykes*, in April 1873, blew the train's whistle, apparently for the purpose of frightening a man's horse. Not funny, not at all.

“Some locomotive engineers are so extremely funny, and are in the habit of playing so many cunning tricks upon people with fractious horses, that they doubtless imagine themselves to be downright practical jokers. As a man was leisurely driving up the turnpike on Tuesday, and as he was crossing the railroad track near the lookout, some fellow in the ‘Major Sykes’ locomotive, which was standing near, blew the whistle apparently for the purpose of frightening the man’s horse. The experiment proved successful; for the animal became frightened at once, commenced to kick violently, and soon broke from the wagon and ran up the turnpike. The man came near being kicked to death. If had been killed,—which might have been the case—what sport it would have been for the engineer or fireman who was the cause of scaring the horse!” (*Carbondale Leader*, April 12, 1873, p. 3)

Another runaway. This time near the Dundaff street crossing. This time a working locomotive was a contributing but innocent factor that resulted in the accident. The accident took place because "the team of young colts took fright at a locomotive." An experienced/mature team of horses would, it can be argued, have regarded the locomotive as a normal component of daily life and would not have taken fright. This runaway was, I would say, accidental, and not the result of a conscious act that was intended to result in a runaway.

“A Runaway. / A brisk runaway occurred on Dundaff Street on Monday of this week. As John bell, Jr., was driving past the railroad crossing on that street, his team of young colts took fright at a locomotive, and ran away furiously toward town. Mr. Bell was thrown out near William Crago’s carriage shop, and was picked up insensible.” (*Carbondale Advance*, January 17, 1874, p. 3)

Another horse frightened by a locomotive. In this case, a horse that was thoroughly accustomed to being around a locomotive "strangely took fright." Locomotive engineer not at fault.

“Frightened by a Locomotive. / John Watt & Sons store horse, driven by Mr. W. H. Farrell, strangely took fright of a Locomotive to which it had been considered thoroughly accustomed, when near the Depot on Tuesday fore noon. It made things were lively for some time, and in spite of all effort to prevent it, the wagon was pretty badly injured. Fortunately no person was hurt.” (*Carbondale Advance*, July 25, 1874, p. 3)

In August 1880, Ed Robbins, residing near the Carverton post office, was kicked in the head by a mule.

“Kicked by a Mule. / Ed. Robbins, son of Elijah Robbins, residing near the Carverton post-office, on the road from Wyoming to the camp-meeting ground, was kicked by a mule a week or two ago, so severely his life for a time was despaired of. The boy was struck on his head, and the skull was completely broken in. Dr. Guthrie, of Wilkes-Barre, went over last week, and removed several pieces of bone, and trepanned the skull.” (*Pittston Gazette*, August 1880)

In January 1881, Michael Walsh, age 15, was kicked in the head by a mule while at work in the mines.

“Michael Walsh, a boy 15 years of age, was kicked on the head by a mule while at work in the mines last Saturday morning. No bones were broken, but a deep cut on his head laid him up for the present.” (*Carbondale Leader*, January 26, 1881, p. 2)

In August 1886, Patrick Kennedy was thrown from a mule and dragged some distance and killed. His remains were interred in the new Catholic cemetery in Carbondale.

“The remains of Patrick Kennedy, the young man who was killed at Forest City last Thursday by being thrown from a mule and dragged some distance were brought to this city on Saturday afternoon and interred in the new Catholic cemetery.” (*The Journal*, August 26, 1886, p. 3)

In August 1887, Patrick Purcell was badly kicked by a mule in the mines at No.3 shaft.

“Patrick Purcell, a young man of about twenty-four, was badly kicked by a mule yesterday, while employed in the mines at No. 3 shaft. He received severe gashes about the face, puncturing the soft part of the flesh. Dr. Kelly was called and attended to the young man’s wounds.” (*Carbondale Leader*, August 13, 1887, p. 4)

In September 1887, Johnny Allen was kicked by a mule as he was in the act of unhitching the traces.

“Johnny Allen, aged about 13 years, a driver boy in the Butler colliery, was kicked in the head by a mule, as he was in the act of unhitching the traces, this morning. His jaw was broken and his face badly cut. He is a son of John Allen, who lives on the road leading to the D&H saw-mill.” (*The Journal*, September 1, 1887, p. 3)

Thomas McCue, a driver boy in the Keystone mines, was kicked in the head by a mule in October, 1887:

"Thomas McCue, aged 13 years, a driver boy in the Keystone mines, was kicked in the head by a mule yesterday, the blow fracturing the frontal bone, and causing pressure on the brain, necessitating the operation of trephining, which was performed by Drs. Shields, Kelly and Gillis. The injured lad is a son of John McCue, who lives on the Powderly road." (*The Journal*, October 6, 1887, p. 3)

In October 1887, George Huddy, a driver at the Northwest Coal Company's mines, was kicked in the pit of the stomach by a "vicious" mule.

"Geo. Huddy, a young man about 20 years of age, who was employed as driver in the Northwest Coal Co.'s mines, was kicked in the pit of the stomach by a vicious mule about 11 o'clock on Tuesday morning. The young man was taken to the home of his parents in the village of 'Simpson.' He remained unconscious for about two hours after the accident, and it was feared that he had received serious internal injuries, but at last accounts he was improving rapidly from the effects of the kick. Dr. Bailey has charge of the case." (*The Journal*, October 13, 1887, p. 3)

One wants to know more about the incident. Why was the mule "vicious"?

In 1887, a young driver at the Northwest mines was kicked on the hand by a mule and had to have one of his fingers amputated.

"A young man named Kirby, aged 16 years, a driver in the Northwest mines, was kicked on the hand by a mule last Friday. The injury rendered necessary the amputation of one of his fingers, and the operation was performed by Dr. Bailey." (*The Journal*, October 20, 1887, p. 3)

In March 1890, a mule was carried up a mine shaft on a hoisting carriage by mistake. Neither the driver boy nor the mule were injured. All's well that ends well.

"IT WAS A CLOSE CALL. / How a Driver Boy Narrowly Escaped Death on Saturday. / A driver boy employed in No. 3 shaft had a remarkable experience on Saturday afternoon which, in the language of the boy, 'was a mighty close call upon his life.' It was quitting time and the lad was making his way from the workings where he had been engaged all day, to the drift through which the mules are taken into the mine. In the course of the journey to daylight the boy and mule must pass directly under the perpendicular opening at No.3. One of the hoisting carriages was down and over this the boy led the mule. As the lad stepped from the carriage the bridle rein

was suddenly jerked from his hand and he was amazed to see the animal disappear up the shaft. / The boy had not heard the signal which is always given by the engineer; the men employed at the foot of the shaft had gone to their homes and he was of course at a loss to understand why the machinery had been started so suddenly. In the meantime the carriage had reached the top of the shaft and the headman and his assistants were taken by surprise when they discovered the freight which had been brought from the depths. / The mule, too, shared in the general surprise and was thoroughly frightened, for when discovered the animal was on its knees. Its back was curved and its head was thrown back in the effort to accommodate its large body to the narrow quarters in which it had made the perilous ascent from the mine. The carriage was quickly lowered to the supply station on a level with Pike street, where the animal could be landed with safety. The headman seized the bridle, but no amount of persuasions could induce the mule to walk out on terra firma. The patience of the man was about exhausted when the engineer suggested that he reverse the order and steer the craft the other way. The scheme worked smoothly, for his muleship, true to his natural instinct backed into the engine room and was then led through a side door to the street and taken to the stable at No. 1 schutes." (*Carbondale Leader*, March 10, 1890, p. 4)

In February 1898, Fred Munn, a driver at No. 1 shaft, while standing at the front end of a trip, was kicked in the face by a mule.

"ACCIDENTS. / Fred Munn Kicked by a Mule This Morning—Painfully Injured by a Fall of Rock. / Fred Munn, an eighteen year old boy, received painful injuries about the back and hips this morning shortly after nine o'clock. He is a driver at No. 1 shaft and while standing at the front end of a trip was kicked in the face by a mule. The force of the blow sent him back between the side of the car and a pillar. The trip was moving and Munn received severe bruises about the back and hips. Dr. Kelly who was sent for made him as comfortable as possible and then had him conveyed to the hospital in the ambulance. Although painful his injuries are not serious. He is eighteen years of age and the son of Mr. and Mrs. Charles Munn of Dart avenue. . . " (*Carbondale Leader*, February 3, 1898, p. 5)

In 1898, a young man named Coggins was badly injured at the Powderly mine when the mule in front of which he was standing suddenly lunged forward.

"TWO ACCIDENTS. / One Resident of This City and Another of Jermyn Painfully Injured Yesterday. / A young man named Coggins received a painful injury at Powderly mine yesterday which may result in the loss of one eye, and possibly two. Coggins was employed as a driver in the mine. He was standing in front of his mule with his mine lamp burning. The mule suddenly lunged forward and struck Coggins with her head. He was knocked against a prop and the animal followed up its first attack with another vicious lunge. The second one knocked

Coggins' lamp from his hat and fairly jabbed it into his eye. The flamed [flames] burned the optic terribly and blinded the driver. The pain weakened him so that he had to be carried from the mine, and conveyed to his home. This is the second accident this week caused by vicious mules." (*Carbondale Leader*, February 4, 1898, p. 6)

Why did the mule suddenly lunge forward? The answer may well be contained in the account given by Stephen Crane of a visit to mule stables—see hereafter, in the materials from Tom Klopfer, the account by Stephen Crane of his visit to mule stables 'in the depths of a coal mine.' Keep in mind that the mule that badly injured Coggins lunged forward when Coggins stood in front of his mule with his mine lamp burning. Here is the last paragraph of Stephen Crane's description of his visit to mule stables in a mine:

"After being long in the mines, the mules are apt to duck and dodge at the close glare of the lamps, but some of them have been known to have piteous fears of being left in the dead darkness. We met a boy who said that sometimes the only way he could get his team to move was to run ahead of them with the light. Afraid of the darkness, they would follow."The fact that Coggins, with his mine lamp burning when he went in front of the mule, may have been interpreted by the mule as a signal to move/lunge forward. Did the mule "attack" the boy? Did the mule take two "vicious lunges" forward? It is entirely possible that the mule was only doing what it was trained to do: move forward when a boy wearing a burning mine lamp appeared in front of him.

In August 1899, a locomotive and a horse collided when the horse got its feet tangled up on the tracks and fell down:

"NOT HIS FAULT. / Engineer Williams' Statement as to How Yesterday's Accident in This City Came About. / E. H. Williams of this city, engineer on Delaware & Hudson train 9, that arrives here at 10.50 a.m., called at this office to make a statement regarding the injuring of the horse belonging to contractor T. C. Robinson yesterday. / He said that about the time the train arrived at the Lackawanna bridge he saw the lad drive upon the railroad track. He blew the whistle, and supposed the boy would know enough to drive over, but he did not. On the contrary, he began to back the horse up, and the load being heavy it was with difficulty the animal could get out of the way. / In backing the horse got its feet tangled up in the tracks and fell down, its front foot being upon one of the rails when the engine approached. The cow catcher pushed the horse's feet off the track, but as the body was so near, the step on the pilot struck the poor animal, lacerating it terribly. / When Mr. Williams saw that the horse was down upon the ground, he tried to stop the train, and did stop, but not till the accident happened. He stated that the time from Mayfield here is but four minutes, and in order to make it the speed must be maintained. Before the boy drove on the tracks, Mr. Williams says he whistled for the station, so the lad must have known that if he crossed track, he would have to do so very rapidly. Mr. Williams stated that there was a man behind the boy, on a beer wagon, who shouted to the boy to go on. 'If my wife had been there on that track,' said Mr. Williams, 'I could not have stopped the train any sooner than I did.' " (*Carbondale Leader*, August 11, 1899, p. 2)

John McAndrew, who worked in the Powderly mine as a driver, was kicked in the stomach by a "vicious" mule in May 1899.

"John McAndrew, a boy employed in the Powderly mine as a driver, is confined to his home on Powderly street—the result of being kicked by a vicious mule." (*Carbondale Leader*, May 17, 1899, p. 2) Why was the mule vicious? They are not vicious by nature.

In September 1899, James Dugan, a driver in the upper workings of No. 3 shaft who was new to the job of driver and not thoroughly accustomed to his work, was kicked by a mule as he passed in the rear of the animal.

“KICKED BY A MULE / Young Man Employed in No. 1 Mine Badly Injured This Morning—Trephining Operation by Dr. W. J. Lowry. / James Dugan a fourteen year old son of Patrick Dugan of South Main street was kicked by a mule in the upper workings of No.3 shaft today and seriously, almost fatally injured. He is employed as a driver boy having lately accepted the position and has not yet become thoroughly accustomed to his work. He had to pass in the rear of the animal when he was struck, the iron shoe cutting a deep gash over his right eye extending over the temple and into the scalp. / He was carried to the surface through the opening at the back plane and the ambulance summoned. Before the arrival of the vehicle came Rev. T. F. Coffey who in his kindly manner ministered to the wants of the lad who was lying in a semi-unconscious condition. / It was a touching sight to see the boy lying there on the rough board that had been the stretcher upon which his fellow workmen had tenderly brought him to the surface. Blood was trickling down from painful wounds but every sign of suffering was suppressed by the plucky boy. He was taken to the Emergency Hospital. / It afterwards developed that the lad had lain some time in an unconscious condition before he was found. An examination proved that his skull had been fractured. Dr. W. J. Lowry the staff physician for the month performed a trephining operation this afternoon and prospects for the boy’s immediate and complete recovery are excellent.” (*Carbondale Leader*, September 13, 1899, p. 5)

George Jordan went for a ride on a mule in October 1889, and fell, with his feet being caught in the harness. The frightened mule dragged the boy nearly a half a mile, which caused his death.

“DRAGGED TOP HIS DEATH. / Tragic End of Little Georgie Jordan as He was Returning from School. / There is sadness and tears in the home of Mr. and Mrs. Michael Jordan, on Price street, where lies the lifeless form of their little son George, aged nine years, who met with a fatal accident yesterday. / It was a sad death. George had just come out of No. 7 school building on Farview street, soon after four o’clock in the afternoon, and seeing some boys passing with a mule, he asked for a ride. He was placed on the back of the mule, and for several minutes he was in great glee, but upon arriving at Dundaff street, the child somehow lost his balance and fell to the ground. As he did so one of his feet caught in the harness, and when he

fell the mule became frightened and began to run and he was dragged on the rough, hard ground for nearly half a mile. Several persons who witnessed the accident tried to stop the animal but to no avail. It dashed on and those in pursuit were forced to witness a sad spectacle. / When the mule got to the barn, the child was unconscious. He was taken to the Emergency hospital and medical aid was summoned, but so serious were the injuries that all efforts to save his life were useless. / He was badly mangled yet the little fellow lingered in excruciating pain till he died. The face, scalp and hands were terribly lacerated, but the internal injuries were of such a nature that no human skill could save the boy. His sad death is not only mourned at home, but his little playmates at school are deeply grieved. He was a bright and interesting boy and his life was all sunshine and happiness. The bereaved parents have the sincere sympathy of the entire community.” (*Carbondale Leader*, October 26, 1899, p. 5)

May 6, 1925: Roman Grabowsky, of Archbald, was killed when dragged by his mule when going to work.”

Mules, it is interesting to learn, were an integral part of the mine rescue process that led to the formation of the First Aid movement in America, in Jermyn, PA. This we have learned from the article titled "Before the Doctor Comes" that was published on pp. 103-105, 110 of the April 1, 1929 issue of *The Delaware and Hudson Company Bulletin*, in which there is a very nice account of the founding of the First Aid movement in America by Dr. M. J. Shields, Jermyn, PA.

Reprinted in that article is an account that was originally published in *Railway Life* about Dr. Shields and the story of his work that was published at the time of his retirement. Here is a portion of the account of Dr. Shields' pioneering work that was originally published in *Railway Life*:

"On a peaceful summer morning in 1899 the quiet of the little mining village of Jermyn, Pa., was suddenly disturbed by three long blasts of the siren at the coal breaker. This was the prearranged signal for calling the mine ambulance—the signal that some unfortunate miner was hurt; also a signal to the mule barn a half mile away from the mine shaft for the 'barn boss' to hitch two crippled mules to the old-fashioned, high-wheeled mine ambulance, and drive to the mine as quickly as possible. Miners' wives could be seen rushing from the doorways of cottages into the streets, anxiously asking each other who was hurt. This cruel custom of the three long whistles of the siren as a signal that a miner was injured had obtained for years. Every one in the village knew and dreaded it. This signal was sounded no matter whether it was a broken arm or a broken back. It caused agonized suspense to every miner's wife. 'Was it my man? How bad is he hurt? Is he killed?' were questions sometimes unanswered for an hour or two. The terrifying suspense sometimes resulted seriously. Nervous women were thrown into convulsions, and the whole village upset and in a tense state of anxiety. / It was just such instances as this, and because

comparatively slight injuries were made serious, and serious injuries made fatal by lack of proper first aid, or through ignorance the injured man received the wrong first aid, that Dr. M. J. Shields, a general practitioner and rather a newcomer in the village resolved, if possible, to remedy the unfortunate conditions. He succeeded in stopping the siren signal for the ambulance by having a telephone installed in the mule barn. / Knowing that he had among his clientele some 'Cousin Jack' English miners from Cornwall who had received some training in first aid from the St. John's Ambulance Association, Dr. Shields succeeded in getting about twenty-five men together and organized, in December, 1899, a first aid association. These men themselves contributed to the work and with the aid of several benevolent societies raised sufficient funds to send to London to purchase first aid books. So during the winter of 1900, Dr. Shields gave a course of lectures and demonstrations on how to handle accidents 'before the doctor comes.' Subsequently funds were raised by volunteer subscription to purchase first aid supplies, and first aid boxes were placed in each of the five 'headings' in the mine. In this manner was the first aid movement started in the United States. . . In 1905, Dr. Shields succeeded in influencing Capt. W. A. May, the general manager of the Pennsylvania Coal Company, to organize first aid and make it a part of the operative plan in the concern's mines. . . The humane movement extended to the whole anthracite coal region and monthly first aid meetings in charge of a physician were adopted by all the larger companies. / Realizing that something further should be done to stimulate and keep up interest, Dr. Shields conceived the idea of first aid contests, patterned after the St. John's Ambulance Association 'competitions' in Great Britain. In October, 1906, there was held in the armory at Scranton the initial first aid contest in the United States. From this beginning first aid contests have spread so they are held, not only by the mining companies, but nearly every industry, notably by the Associated Bell Telephone Companies and the railroads."

7020

Impact of Work Stoppages in the Mines on Horses and Mules

The driver boys and their mules were key players in the successful mining of anthracite coal, and work stoppages initiated by the driver boys could, and sometimes did, stop all work in and around the mines, as it did in June 1871:

“Force of Example. / The Boys—the mule drivers in the mines here, are on a strike this morning. It stops everything around the mines.” (*Carbondale Advance*, June 17, 1871, p. 3)

On Friday, August 10, 1872, a drove of mules came up through Main Street in Carbondale. Knowledgeable observers knew that this meant that the work stoppage in the mines had come to an end.

“The latest, most numerous, and most distinguished arrival we have heard of lately, is the drove of mules that made the dust fly as they came up through Main street just before noon on Friday,

to resume their labors in the mines. One excessively polite individual uncovered his venerable head as they passed along the street.” (*Carbondale Leader*, August 10, 1872, p. 3)



"Mule Driver Boys Coming from Work." Post card in the collection of the Delaware and Hudson Transportation Museum, Carbondale, PA.

In July, 1874, due to a partial suspension of work in Luzerne County, the mules were sent out to pasture in Susquehanna County:

"All the mules of the D & H Company thrown idle by the partial suspension of work in Luzerne Co., have been taken to Susquehanna Co. for pasture." (*Honesdale Herald*, July 16, 1874, p. 3)

The mules at the Lackawanna Breaker are being brought back from their pasture down the valley. Work, it appears will soon be resumed at the breaker:

The Company's mules, which were formerly employed in the mines around the Lackawanna breaker, were brought up from their pasture down the valley a few days ago. This would seem to be an indication that work is soon to be resumed." (*Carbondale Leader*, August 20, 1874, p. 3)

Again, in on November 6, 1874, the driver boys walk out at the Lackawanna breaker, when they are told that they must clean their mules, and all work ceases there.

"A Turn Out. / The driver boys of the Lackawanna Breaker turned out yesterday morning, causing an entire stoppage of the works. It is said that the boys had been notified that they must

clean their mules, and rather than do this at the wages paid they preferred to quit work. These boys who have stopped this large breaker range in age from ten to fifteen years.” (*Carbondale Advance*, November 7, 1874, p. 3)

Hide the mules. Let's go to the circus.

“The driver boys played a trick on the miners the morning of ‘circus day.’ When the miners went to their daily toil, they found no mules and no boys anywhere within sight or hearing. As a natural consequence they had to return to town and witness the circus also, or else hoe the potatoes in their gardens to while away the time. The boys wanted to see the show and see it they would.” (*Carbondale Advance*, June 19, 1875, p.3)

In June, 1876, during a suspension of mining, all of the mules in and near Carbondale were sent out to grass. It's an ill wind that doesn't provide benefit to someone (in this case the mules) would be a bad and unusual one indeed.

"Another suspension of mining operations is in order. These things are so fashionable during the Centennial year that no one is at all surprised when the announcement is made. The present suspension, which is quite general throughout the coal fields, began on Monday, and will doubtless continue until the first of August, although as to that no one can presume to speak with any degree of certainty. In this vicinity there will probably be no mining for some time to come. The D. & H. C. Co.'s mules, which are used in all its mines in and near Carbondale, have been sent out to grass, and, in the opinion of 'old stagers,' who claim to know a thing or two about the sly and secret movements of the Company's servants, they will not be brought back again until the first day of August, if they are then. [emphasis added] Some of the mines down the valley will be worked each alternate week from now till August 1, but the majority of them will lie entirely idle during that time. The gravity road, which has been still as the grave this week, will be run every other week in order to convey the coal from the mines in operation. Not a single colliery owned by either of the members of the coal combination has been worked this week. The Company's mines in the southern portion of the city had been worked for several weeks up to Saturday night, but they will not be worked again very soon. The big Lackawanna breaker has now been idle for several weeks more. The laboring people will be able to find but little regular occupation during June and July.” (*Carbondale Leader*, June 10, 1876, p. 3)

During the difficult period of the strike of 1877, the mules, in the short term, were the beneficiaries: they were sent out to pasture:

“THE MINERS’ PEACEABLE STRIKE. / ALL THE MINERS IDLE BUT ALL OF THEM QUIET AND ORDERLY—THE CAUSE OF THE STRIKE—ALL THE SHOPMEN SUSPENDED. / All the Delaware and Hudson Canal Company’s mines in the valley have been idle since Saturday, and are likely to remain so for some time to come unless the company allows

the increase of wages which the miners have justly asked for, and which they need in order to live as they ought to be permitted to live. For the past year the wages of the hard-worked miners have been gradually reduced, until now they are scarcely able to earn enough to buy flour for their families. The reductions have been made from time to time—ten per cent. in one month, and again ten per cent. a month or two after—so that when the past spring arrived the wages were so far below living wages as to make the miners think seriously of striking for that which they really deserved and needed. After three or four reductions had been made, the company, feeling somewhat ashamed to come out boldly and dock the miners another ten per cent., commanded that they should mine 2,700 pounds of coal for a ton. This proceeding was plainly a further reduction of wages in an underhanded way; but the miners, after holding several meetings, and after sending committees from their number to the officers of the company to ask that they not be required to mine so many hundred pounds more than a ton for a ton, and getting so little satisfaction from the officers, concluded to continue working until something further should be developed. Their wages were very low, yet many of them argued that it was better to work for what they were receiving than not to work at all, while others claimed that they might just as well starve without pretending to work as to starve while working and receiving nothing for their labor. Matters went along in this way for three or four months. The miners were given ‘steady’ work, as the company was pleased to call it, but ‘steady’ meant scarcely half-time at the lowest possible wages. Many a miner in this city has worked a part of each week-day in the month, and how much wages has he drawn on pay-day? Some of them solemnly assert that they have received as little as \$7 for a month’s work. Hundreds of them have not been permitted to earn more than \$12 or \$15, while very few of them have made as high as \$20 a month. They worked whenever the company said they might, and took whatever the company said it would pay. When pay-day came very many of them had hardly enough money to purchase the plainest necessities of life, yet they labored patiently, hoping that the company would soon come to see that it was impossible for them to work for the low wages they were receiving; yet every day they sorely felt the injustice which they were laboring under. Their occupation was a dangerous one, their labor was hard, and their prospects for the future were dark so long as they consented to work for the mere pittance which they were receiving. Is it any wonder, then, that in time they should ask to be allowed to earn enough for their hard work to keep themselves and families in the real necessities of life? It is well known among those who are acquainted with the miners and the life of the miner that, in many a chamber where four stalwart men were working together, not more than two dollars per day could be earned by the four—only fifty cents apiece per day. Let all classes of people take this matter right home to themselves, and then they can readily imagine how they themselves would feel if they were placed in these miners’ positions. / As stated in our last issue the miners held several meetings last week, at each of which the situation was fairly and freely discussed by intelligent speakers. It was decided that a committee should be appointed who should present the case of the miners to the chief officer of the coal department. This committee was instructed to lay the facts before that official, to ask a reasonable increase of wages, and to get his answer to the miners’ just demands. The committee went to Scranton on Friday of last week to confer with the official in question, and on Friday evening several hundred of our miners met at the ball grounds above the depot, whery were to

hear the report of the committee who were to reach Carbondale on the eight o'clock train. It had been decided beforehand that, in case the committee failed to get any satisfaction from the representative of the company, the miners should peaceably strike at six o'clock on Saturday afternoon. The committee arrived on the eight o'clock train; and immediately proceeded to the ball grounds to make their report. The members were met and cheered by the large body of orderly men there assembled, and, as their report was unfavorable to the miners, and inasmuch as the company's representative had given them not the least satisfaction, the miners all knew that a strike would begin on Saturday at six o'clock. Speeches were made by different men on the grounds, and the spirit of peace and good order prevailed throughout the throng of sober and law-abiding men. When the decision had been made known to every one of the downtrodden miners, they all quietly started for their homes. They worked as usual on Saturday, but when six o'clock arrived all work at once ceased. / At four o'clock on Monday morning a large number—perhaps three or four hundred—of miners might have been seen in and around the yards above the depot from which the coal trains for the north are sent out. Two or three coal trains were in readiness to start over the Jefferson Branch, but they were prevented from going. There has been no coal shipped over the Jefferson this week, and not a car-load has passed over the gravity road. The cars that were loaded late on Saturday, and those which were along the line of the gravity road when work ceased on Saturday afternoon, are now just where they were left then. The passenger and freight trains on both the locomotive and gravity roads have not been interfered with in the least. The miners are idle, the breakers are quiet, a score of locomotives are at rest in the round-house, the whistles on the gravity engines have been muffled, there is no puffing of steam to be heard, no volumes of steam to be seen rising from the many lately busy places, the mules have been taken to the pasture in the adjoining country. [emphasis added] the miners, slate-pickers, mule-boys, switch-tenders, engineers, firemen, runners, brakemen, pulley-greasers, and many others are at rest from their labors, and comparative stillness reigns. / There has been a concert of action between all the miners of the D. & H. C. Co. from here to Plymouth and those in the employ of the D., L. & W. Co. None of the mines of the latter company are now being worked. The miners demanded an increase of twenty-five per cent. which the company refused to grant. / On Monday our Carbondale miners were numerous on the streets, but they were all quiet, and were mainly engaged in discussing the situation. They are determined to hold out until such time as the company shall see fit to be just with them. Many people express the opinion that the miners will be assisted to hold from work until the company is compelled to come to their terms which are conceded by everybody to be very reasonable. We hope they may do so, and trust that they will get their just dues before many weeks shall have passed away. They can endure a strike now much better than they could in the winter season. Since the strike began the city has been more quiet and orderly than ever, and there is not the least danger of any lawless acts being committed. This community will take good care of itself without any outside assistance. / When the company learned that the miners had ordered a strike, a command was sent out to this city to have all work in the car, blacksmith and machine shops suspended on Saturday. Consequently there has been no work done in either of those shops this week. The number of men and boys all told who have been out of employment this week in this immediate vicinity is probably not far from two thousand. A few of this large number have been able to find

employment for a time at some other work, but the proportion is very small. The majority of the strikers can live very cheaply, for the most of them have cows and gardens. / We remember never to have experienced so quiet a time in Carbondale as at present, and we doubt if all lines of business have been so dull in many a year as they are now. Let us hope, however, that it will not long continue as it is." (*Carbondale Leader*, August 4, 1877, p. 3)

In August 1899, the driver boys—and their mules—at the Wilson Creek colliery went on strike "and in consequence the mine is practically idle throwing a large number of men out of work":

"DRIVER BOYS OUT ON STRIKE. / Those at the Wilson Creek Colliery Asked for a Resumption of Their Former Rate of Wages. / Labor troubles are spreading. Following the demand for redress of grievances made by the employes at the Franklin colliery comes news of discontent among the driver boys in the Wilson Creek mines of the Delaware and Hudson company. There are a number of openings to be included in the Wilson Creek colliery and extensive operations are carried on there. Although the introduction of air motors did away with a number of the driver boys employed, there is still a large number required and they today decided to go out on strike. / The trouble has been brewing for some time. Its inception was in a reduction of wages made by the company last spring. At that time the drivers who had been receiving \$1.38 per day were reduced to \$1.25 and the wages of the other classes of drivers were reduced proportionately. / Demands have been made recently upon the bosses for a re-establishment of the old scale. The matter was laid before the company officials it is said and an answer received that it would be impossible to comply with the demand. The drivers therefore went on strike today and in consequence the mine is practically idle throwing a large number of men out of work." (*Carbondale Leader*, August 24, 1899, p. 5)

During the coal strike in 1925, 50,000 mules were brought above ground and sent to pasture.

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Mules No Longer Needed in the Mines and at the Breakers

By the later 1870s, horses and mules were beginning to be replaced by small locomotives to move coal cars. In May 1876, it was announced that at the Lackawanna Breaker in the Carbondale yard, horses and mules would no longer be used to haul coal cars to and from the upper openings of the mines which fed the breaker.

"The mules and horses heretofore used to haul coal cars to and from the upper openings of the mines which feed the Lackawanna breaker are to be used no more. A narrow gauge track is being laid to that a small locomotive will do the work of a large number of horses and mules. The grade from the breaker to the upper openings has lately been levelled and the planes done away with. A long trestle is being built north of the breaker, and when this is finished and the track laid, the small mine cars will be run up into the head of the breaker from the north side. Some of the coal which will come to the breaker over this track has to be brought for a distance of over two miles, and the expense saved by doing away with mules and horses amounts to quite a sum. The coal which is mined nearer the breaker, and which is brought to the surface through the

slope at the foot of the west end of the breaker, will hereafter be conveyed as formerly. No work will probably be done in these mines until the road leading to the upper ones is completed. It will require at least another month to finish the trestle, and a few days thereafter to lay the track. Whether work will then be resumed, or whether no mining will be done until fall, no one seems to know.” (*Carbondale Leader*, May 13, 1876, p. 3)

The longwall system of mining was introduced in America in 1889. This new system of mining required fewer mine mules and mine cars. The handwriting was on the wall. Horses and mules were on their way out in the anthracite mining industry.

“A NEW SYSTEM OF MINING. / No More Culm Heaps—Coal Waste Kept in the Mines.
/ The Scranton Truth of Saturday says: Mr. Wm. S. Gresley, a mining engineer of Leicestershire, England, is in this city. He has come to the Pennsylvania region to examine the system of mining. Since his arrival here Mr. Gresley has written for various mining journals a number of articles explaining the ‘Longwall’ system of mining in use in England, and in particular in Warwickshire. Mr. Gresley’s article in a recent number of *The Colliery Engineer* caused a great deal of comment among mine owners and mining engineers. Of the coal mined at present only about 60 per cent, is taken out. Mr. Gresley claims that by the ‘Modified Longwall’ system 90 per cent. of the coal can be mined, thus increasing the present yield of coal about 50 per cent. / The Longwall system, as proposed by Mr. Gresley, will do away with pillars entirely, and the roof will be allowed to cave as the work proceeds. According to this system a heading is to be run from the shaft slope or tunnel to the end of the line of lease. At that point the farthest from the mouth of the mine the work of taking out the coal is to be begun. On each side of the heading, openings are to be made, and the coal is to be taken out for about 500 feet of each side. The work is then to proceed toward the mouth of the mine, and the roof allowed to settle behind the men as they advance. / In order to protect the men in their work and to make the mining possible, the roof is supported by props and by an abutment arrangement of logs raised in the form of a square pillar against the roof, the vacant space being filled in by ‘gob,’ or refuse, slate, clum, rock, etc. The men will work in parties of about 100 on each side, and divided into companies of 10 or a dozen each. As the work proceeds it is evident the heading will get shorter, and the roof being let down on the gob, having no pillars to support it, will occasion no danger thereafter to the surface or to property thereupon. / As there will be no pillars all the coal will be virtually taken out, the only loss being the culm waste. / All mines, however, cannot be worked by the system. It is only applicable in veins where the pitch is less than twenty-five degrees. / The fall of roof upon the gob behind the men will come quicker, and the squeeze occasioned by such fall will cause a loosening of the coal, making it easier mined, and requiring less powder. The danger arising from old workings will be avoided. It is further claimed by Mr. Gresley that the water will find the best possible receptacle in the gob, and on this account there will be less need of pumping. / He further states that it will require no more timber than is at present used to prop up the roof; and fewer mules and mine cars will be needed. [emphasis added] / The oft-repeated question as to what to do with the culm heaps and culm would be easy of solution. The

culm and waste, slate, sulphur, etc. could be brought back into the mine to fill up gobs, and thus save acres of valuable land, and change the hideous appearance of a mining town studded with half a dozen of these dismal looking heaps. / The increase in the yield of coal in a given area would be about 50 per cent. which means a corresponding increase in the revenue to be derived by land owners. The coal measures of this State are fast being worked out, and even now a fear has been expressed by some of their too early exhaustion. It is not long ago that Col. J. A. Price had an article on the subject of economizing the waste of coal and reducing it to a minimum, claiming that the preservation of the coal tracts like the care of our forests is of great moment to the State. / A number of mine owners have in consideration the proposition of adopting it in their mines. It will probably be first used at Olyphant, where preparations are already being made for its introduction. If it be adopted one place and prove successful, there can be no doubt of its acceptance wherever it can be used with practical results. One drawback to the system is there is no guarantee that the danger to human life will be in any way lessened by its use, and this is a serious one indeed.” (*Carbondale Leader*, November 25, 1889, p. 3)

Not surprisingly, "mules for sale" ads began to appear in the Carbondale newspapers at this time:

Mules for Sale.

Seven young, sound and gentle
Mules, in good condition, among
them one matched pair, broken to
pole and suitable for the road, also
one good under saddle, all well
proportioned and strong, are offered
for sale, cheap—single or by lot.
Apply to Belmont Colliery, Carbon-
dale or Grassy Island Colliery,
Peckville. 2.4.6.

(*Carbondale Leader*, February 20, 1890, p. 2)

The introduction of mechanical underground haulage powered by electricity, in the 1890s, made it very clear to all that use of animal power in the anthracite mining industry—mines and railroads—was coming to an end. Electricity was not only more economical but also more reliable than mule power. The arguments are clearly set forth in favor of electricity in the following article from the December 7, 1892 issue of the *Carbondale Leader*:

1892: “UNDERGROUND HAULAGE. / Agitating the Adoption of New Motive Power in the Mines. / Description of Several of the Most Improved Systems That Might Be Introduced Here. / With the rapid progress that science has made of late in almost every branch of the mining industry, with the necessity for a curtailment of the cost of production certainly increasing, it is not surprising that inventive genius, as is always found to be the case when any pressure in the industrial world calls for relief, should have set to work and devised means

whereby the great natural resources may be developed and brought forth with less expense and greater expedition, thus, by lessening original costs, steadily augmenting the consumption. It is simply the march of time effecting [sic] the politico-economic world. / One of the grandest achievements of late years, in its effects upon cheapening the production of coal, is the introduction of mechanical underground haulage, whereby the use of animal power and consequent expenditure for its support may be almost entirely dispensed with. / When it comes to close figuring as to the cost of mules, the feed required for them, the number of drivers to handle and take care of them, the possible loss that may at any time be incurred by disability or death, operators are not slow to solve the very simple mathematical problem, that mechanical haulage is not only the cheapest but the most reliable, [emphasis added] and the question with many simply hinges upon the original cost of introducing the system into their mines, although the fact is apparent, and must be to all who will but investigate, that any system of mechanical haulage when once found, applicable, and carefully established, must in a very short time pay for itself. The systems at present in use and giving most perfect satisfaction are the endless rope system, the tail rope system and the electric system. Much depends, of course, upon the condition of a mine as to which of these systems may be most efficient, says the Black Diamond. / Where grades are so slight that gravity can not be utilized as a motive power, a continuous system of wire rope haulage is commonly applied. There are two general arrangements of this kind, known respectively as the 'tail rope' and the 'endless rope' systems. / The tail rope system is one by which the haulage of the loaded car is accomplished with one rope, while the empties are drawn back by a separate light rope known as the tail rope. The two drums upon which these ropes coil may be located at the opposite ends of the line and driven by independent engines, or preferably located at the mine entrance, and driven from the same engine. The latter arrangement requires more tail rope, but saves the expense of an extra engine, besides permitting the erection of the engine outside the mine. At the end of the main line and of each branch there is a sheave from four to five feet in diameter, called the 'tail sheave,' around which the tail rope passes./ The drums are generally driven by friction or clutch connections, from the engine shaft, so that each may be alternately driven or left to uncoil loose, as desired. These drums are provided with brakes wherever the grades make it necessary. Two independent lines are often operated by one engine, in which case four drums are arranged to be worked by one man. / If the slope into the mine is an easy one, the trips may be hauled directly out, by providing an engine of sufficient power, and if at the same time the grade is steep enough for the empty trips to descend by gravity, the tail rope connections may be made at the front of the slope. / Where the slope from the mine entrance to the tipple is in favor of the loaded trips, these may be lowered directly by means of the tail rope, the main rope being knocked off as soon as the trip comes out of the mine. In fact, a variety of conditions may occur to modify the character of the line and method of operating; the grades being a most important feature in this consideration. In laying out and estimating on any line, therefore the importance of having an accurate profile to work to is manifest. / The endless rope system, as its name implies, is based on the operation of an endless rope. Usually this is run continuously in one direction, the engine being fitted with a fly-wheel and a governor, and requiring but little attention. The cars are attached at any point, by means of clutches or grips, of which a variety of styles have been devised. / Sometimes, however, the rope is operated in both directions, in which case a reversing engine is required. This is practically a

modification of the tail rope system, as the trips are handled in the same manner, excepting that the attachments are made to an endless rope. These attachments usually consist of links socketed in the rope, which are not as objectionable in this case as they would be in the other, since they do not have to pass around the engine drums. / 'In the majority of mines in this vicinity the mule power is still used and whether it will be ever changed is a matter only of conjecture' said an old miner yesterday. 'The grades in our mines have been generally arranged to do away with inside planes and as mules are necessary to draw the cars from the foot of the slopes to the chambers they may possibly be continued as the motive power for the entire mine.' / At the Erie breaker below the city electricity has been introduced and is said to be more economical than mule power [emphasis added]. This might be used to advantage perhaps in other mines of the vicinity, but the abrupt curves that abound in many of our underground workings almost preclude the possibility of using the rope system for propelling cars on what is known as 'the level.' " (*Carbondale Leader*, December 7, 1892, p. 2)

In April 1899, at No. 3 colliery on the south side of Carbondale, when an endless chain was installed to facilitate the taking of coal cars out of the mine there, fifteen driver boys and fifteen mules were put out of work. In the *Carbondale Leader* of April 10, 1899, we read:

"BIG CHANGE IN THE MINES. / They Mean Full Time For the Men All Summer—New Opening To the Rider Vein. / This is a time of changes in this vicinity and there bids fair to be a complete transformation in the mining as well as the railroad department of the Delaware & Hudson company. . . No. 3 colliery on the south side is idle today as workmen are engaged in putting in an endless chain to facilitate the taking of cars out of the mine. The introduction of the cable will do away with fifteen stations in the mine or in other words it will do the work of fifteen driver boys and fifteen mules. It will, however, be of great benefit to the miners as by the old methods the cars could not be handled rapidly enough to keep the men supplied and there were many complaints on this account. / Tomorrow will be pay day at the south collieries." (p. 5).

On the question of the end of the use of mules in the mines, Sam Gentile and Harry Cook, both of whom were present at the seminar on working horses and mules that was held in Carbondale City Hall on January 25, 2007, reported:

Sam Gentile: "The mules and horses were replaced by lokeys in the mines." Harry Cook: "They couldn't use small steam engines and they couldn't use electric engines, so they used battery-powered lokeys." Sam works as a volunteer tour guide at the underground mine tour at McDade Park. He knows the lyrics to the song "My Sweetheart Is the Mule in the Mines."

In October, 1899, following the announcement on October 28, 1898 of the closing of the Gravity Railroad on December 31, 1898, it was announced that the D&H barns in Carbondale would be closed.

1899: **“TO BE CLOSED. /Delaware and Hudson Gravity Railroad Barns in This City no Longer Scenes of Activity.** / The echoes of the announcement of the abandonment of the Delaware & Hudson gravity road are still being heard although that melancholy event became a fact many months ago. The old road has gradually disappeared and with it has gone many of the things that were necessary to its maintenance. / Among the last to disappear as places of activity are the company barns in the rear of the local coal office on Salem avenue. The horses which were kept there were generally employed on the gravity system and as their usefulness is at an end in this capacity the barns will be vacated and closed, it is said. / This relieves of their responsibilities several of the oldest and most trusted of the company’s employees. Louis Bush will on November 1 sever his connection with the corporation he has been so prominently connected with for thirty years. He came to this city from Mt. Pleasant to assume charge of the purchasing and care of the company’s horses in this section; succeeding the late Emmons Eaton. He is one of the most experienced and capable horsemen in Pennsylvania and during his service with the Delaware & Hudson there have been no mistakes and few losses in his department. / Another old and valued employe who leaves the service of the company is Bernard Mullady; who, however, remains in the personal employ of superintendent Manville.” (*Carbondale Leader*, October 24, 1899, p. 5)

In 1902, the 96 mules from the D&H barns on the South side of Carbondale were driven through town on their way to the D&H pasture, which extended from "Fourty-fourth street to the Corrigan hotel on the Crystal Lake road in length and from the Lake road to the Mills farm in width, embracing 400 acres of excellent pasture land." The 75 mules from the Wilson Creek and Coalbrook barns were already at pasture "in a strip of land on the opposite side of the road, of about the same areas as the other tract." What a sight it must have been to see these mules as they were turned loose / liberated into four hundred acres of pasture land!

“TURNING MULES OUT./ Main Street was the scene of unusual activity yesterday noon when the mules from the company’s barns on the South side of the city were being taken through the city to the large pasture land on the Crystal lake road. Those from the Powderly and No. 1 barns came first, numbering 96 animals. The mules were taken to the large tract of land which the company had fenced for the purpose and which extends from Fourty-fourth street to the Corrigan hotel on the Crystal lake road in length and from the Lake road to the Mills farm in width, embracing about 400 acres of excellent pasture land. The mules from the Wilson Creek and Coalbrook barns have been at pasture for the last few days and they number 75. They occupy a strip of land on the opposite side of the road, of about the same area as the other tract.” (Gritman Scrapbook, newspaper clipping dated “Scranton, Pa., May 16, 1902.”)

At the time of the 1902 anthracite strike, the Delaware, Lackawanna and Western, the Erie, and the Delaware and Hudson, sent out to pasture the 5,000 mules that worked for those three rail lines. This we learn from the article on the Grassy Island Washery that was published in the *Scranton Times* of May 20, 1902 (reported by Bob McDonough, *Murphy*, p. 245).

"That the companies do not intend making any concessions [in the 1902 anthracite strike] and expect a long fight is indicated by the fact that they are sending the mules, taken from the mines, to pasture in the country. The Delaware, Lackawanna and Western company has secured pasture at Factoryville, Wyoming County, and Hanover, Luzerne County. The Erie is sending its mules to Wayne County in the region of Lake Ariel. The Delaware and Hudson Company is looking for pasturage in the neighborhood of Carbondale. Five thousand mules are used by these companies alone."

In that same article on the Grassy Island Washery, we read:

"Some of them [the mules that were turned out at the time of the 1902 strike] were born in the mines, and not a few of them saw daylight for the first time when the strike of 1900 was on."

It is hard to believe that any of these mules were born in the anthracite mines. The journalist who wrote this article does not, I think, understand that most mules are the offspring of a male donkey and a female horse. In addition, it is highly probable that all of the mules that worked in the mines were born and raised above ground and, when mature, began their work careers underground—in which case they would have seen daylight in their growing up years.

That same journalist gives the following very interesting description of the behavior of the mules when first taken out of the mines:

". . . It is usually about three days before they become used to the light. For the first day or so they wander around as blind as bats, colliding with one another and the fences of their corrals and kicking viciously at every collision."

The same journalist nicely concludes his article with the following statement (which is true and irrefutable):

"The mules, at all events, will be benefited by the [1902] strike."

The behavior of mules that have been taken out of the mines after long periods of labor underground is well described in Stephen Crane's *In the Depths of a Coal Mine*, pp. 102-103:

"Over in a wide and lightless room we found the mule stables. There we discovered a number of these animals standing with an air of calmness and self-possession that was somehow amazing to find in a mine. A little dark urchin came and belabored his mule 'China' until he stood broadside to us that we might admire his innumerable fine qualities. The stable was like a dungeon. The mules were arranged in solemn rows. They turned their heads toward our lamps. The glare made their eyes shine wondrously like lenses. They resembled enormous rats. / About the room stood bales of hay and straw. The commonplace air worn by the long-eared slaves made it all infinitely usual. One had to wait to see the tragedy of it. It was not until we had grown familiar with the

life and the traditions of the mines that we were capable of understanding the story told by these beasts standing in calm array, with spread legs. / It is a common affair for mules to be imprisoned for years in the limitless night of the mines. Our acquaintance, 'China,' had been four years buried. Upon the surface there had been the march of the seasons; the white splendor of snows had changed again and again to the glories of green springs. Four times had the earth been ablaze with the decorations of brilliant autumns. But 'China' and his friends had remained in these dungeons from the daylight, if one could get a view up a shaft, would appear a tiny circle, a sliver star aglow in a stable sky. / Usually when brought to the surface, the mules tremble at the earth radiant in the sunshine. Later, they go almost mad with fantastic joy. The full splendor of the heavens, the grass, the trees, the breezes, breaks upon them suddenly. They caper and career [careen] with extravagant mulish glee. A miner told me of a mule that had spent some delirious months upon the surface after years of labor in the mines. Finally the time came when he was to be taken back. But the memory of the black existence was upon him; he knew that gaping mouth that threatened to swallow him. The men held conventions and discussed plans to budge that mule. The celebrated quality of obstinacy in him won him liberty to gambol clumsily about on the surface. / After being long in the mines, the mules are apt to duck and dodge at the close glare of the lamps, but some of them have been known to have piteous fears of being left in the dead darkness. We met a boy who said that sometimes the only way he could get his team to move was to run ahead of them with the light. Afraid of the darkness, they would follow."



In 1966, a law was passed that made it illegal to keep mules in the mines.

Some of the mine mules that were sent out to pasture at the time of the 1902 strike managed to get out of their enclosures, regrettably, and get into trouble with the farmers in the Clifford and Dundaff area and elsewhere.

“MISCHIEVIOUS MINE MULES. / Those Sent Over the Country Arouse Owners of Pastures and Crops. / The festive mine mule which usually receives credit for most of the mischief of mine life is sustaining his record on terra firma, in the new pastures whence he was sent after the inauguration of the coal strike. / From over the hills over Clifford and Dundaff way, from the centre of Susquehanna county, comes the cry that Mr. Mule, who is rustivating over that way, is having the biggest kind of a panic with the crops of the farmers over that way. Saturday one hundred of the friskiest of them, just enough to raise all sorts of mischief and mule fun, cut loose and, making their way into an oat field, fairly destroyed it. While the oat field was being made a sort of cavalry charge ground, another pack of the sporty mules, engaged a different diversion in another field chasing young cattle. The chase ended in a tragedy of the field; a heifer belonging to the owner of the land was killed. / The farmers thereabouts are a bit riled and there is talk of indignation meetings and law suits if the frisky mules be allowed to continue their policy of making themselves to home.” (*Scranton Tribune*, June 5, 1902)

The fact that the mine mules that were pastured in Clifford Township when they were no longer needed for work in the mines were a nuisance and caused much damage, including killing a young heifer owned by David Jones, is also underlined by Sally Fishbeck and Patricia Peltz in their excellent book, *Clifford Township Two Hundred Years*, that was published in 2006:

“Mine Mules / The only coal mines in Clifford Township were located in the southeastern corner near Forest City. Mules were used extensively in the mines to transport coal. They were housed and fed in stables built in the mines, and many of them spent nearly their entire lives under ground. Occasionally, however, it became necessary to bring them out of the mines. One such occasion came in 1902 when the anthracite coal miners called a strike which lasted for five months. During the strike, hundreds of mine mules were brought from the coal fields of the Lackawanna Valley to be pastured in Clifford Township.”

Sally Fishbeck and Patricia Peltz also cite a newspaper article which references much of the same damage caused by mules that is identified in the notice from the *Scranton Tribune* of June 5, 1902, cited above. The newspaper article that they cite was published on June 13, 1902, as follows:

"The mine mules which were turned out to pasture are making things hot there. . . Recently about 100 mules broke loose in a neighboring oat field and could not be driven out until they had completely ruined the same while a number at the same time were in David Jones' pasture chasing his young cattle and refused to leave until they had killed a young heifer. Should this thing continue our people will be forced to call an indignation meeting and proceed to have their just claims satisfactorily met."

Fishbeck and Peltz: "The mine mules were accustomed to being in cramped quarters and darkness. When brought above ground into the sunlight and fresh air, the mules ran and romped, exploring their unfamiliar surroundings. The farmers were paid to accommodate these mules; however, it is evident from accounts of the time that the mules were a nuisance and very destructive."

Newspaper article from October 31, 1902, cited by Fishbeck and Peltz:

"No people, outside the striking miners, are gladder to see the strike settled than are those who pastured mine mules for the coal companies in the vicinity of Welsh Hill, Elkdale and Clifford. The mules destroyed the trees, by eating the bark as high as they could reach, knocked down stone walls, ate the fence posts in such a manner as to allow the wire on the barbed fences to fall, destroyed crops, and even killed domestic animals, besides making themselves general nuisances. While the price paid for keeping them was fair, it is doubtful if any who have kept them this summer could be hired to do so again."

Fishbeck and Peltz: "A few lucky mules were retired to local farms. On the Curtis Lee farm near Stillwater Pond the retired mules were used for farm work, such as pulling the wagon of milk cans to the spring each day. Young Foster McKercher also rode a mule to school in Forest City, where the mule was stabled in a livery during the day."

A photo of six people, two mules and a dog—the dog on the back of one of the mules—is given with this page-article from *Clifford Township Two Hundred Years* by Sally Fishbeck and Patricia Peltz, 2006. The caption on the photograph reads as follows: "Mine mules near Stillwater, circa 1924. Curtis Lee, Rover (on mule), Glenn Lee, Stella Lee, Foster McKercher, Lila McKercher and Margaret Lee. Courtesy of Alma Lee Sparks."

Some "frisky mules" from the Last Chance (aka., Edgerton Mine), owned by the Temple Coal and Iron Company, also managed to get out of their pasture and come to Carbondale, where they caused considerable damage to gardens and grounds of Clark Hetzel on Lincoln Avenue.

"NEED CHASTISING / Frisky Mules from the Last Chance [aka., Edgerton Mine] Bring Mine Owners into Suit/ The average mine mule is likely to do anything that the funny papers would call real devilish. Mr. Mule can do anything from exhibitions of high kicking that would make the kick artist in the variety show sick to getting his owners into trouble because of his doing stunts that would cause the village cut up of Honesdale to look like half past one or two. / A fractious bunch of these frisky rascals from the Last Chance, after having all kinds of fun in their pasture, have brought home a damage suit to the doors of the officials of the Temple Coal and Iron company. A few nights ago tiring of the irksome solitude of the field on the east side, where they have been pulling grass for several weeks, [the mules] decided upon seeing the sights of Carbondale where all the electric lights could be seen from the Last Chance settlement. Breaking camp they ran a foot race until they reached the residence of Clark Hetzel, on Lincoln

avenue. Here the mischievous mules halted to pick a few bouquets to give the winners of the race. They did their picking very well indeed. The rose bush they picked up roots, earth and the rest; the hydrangea bush was put out of business as quickly as the crescents would do the same trick to McCain's patch team. Some of the more playful of the mules proposed a game of rabbit in the hole and to carry on the diversion pawed up holes almost big enough for Mr. Hetzel to set out some more of the same kind of hydrangea bushes on which their muleships had such a picnic. / This exercise on the fruit yard worked up a vegetable appetite and knocking down the fence that divided the garden the Last Chancers broke through [and did] a mule cakewalk in the vegetable kingdom. By this time Mr. Hetzel and family were aroused and succeeded in putting the mules on the run before they made a football of the house which might have been the next thing on the programme of sports. A few of the mules made their way down to the city and being corralled were cared for in Morrisons livery until the next day. / Mr. Hetzel has notified the Temple Coal and Iron Company that he expects to be recompensed for the damage of the mules otherwise he will bring suit. / Up to a week ago there was a night watchman to keep the mules in their stalls, but since he was let go the animals have been raising all kinds of mischief in that vicinity." (*Scranton Tribune*, Monday, September 15, 1902, p. 2)

Even though most mining companies stopped using mules to any great extend by the early years of the twentieth century, mules were still used in some mines as late as 1925.

Peg Winter, Jermyn, reported on 02-06-2007 that her father, Albert Wesley Winter, interrupted his high school education for one year, his junior year, probably 1925, to work in the mines at Jermyn taking care of mules.

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Other Animals and the D&H

Mules weren't the only animals that sometimes got into trouble in the communities served by the rail lines in the nineteenth century, and on the rail lines in those communities. Other animals, too, had run-ins with rail cars.

Cows

Especially in rural districts but also in town, cows were sometimes not fenced in, and were a nuisance, not only because they damaged gardens (owned by persons other than the owners of those cows) but also because they seem to have been attracted to railroad tracks, where they were hit by railcars and more often than not killed.

Robert D. Copeland, who worked for the D&H for 59 years (retired February 1, 1932), for 45 of those years as an engineman, had many encounters with cows on D&H tracks. In his

biographical portrait ("Dean of D. & H. Enginemen") published in *The Delaware and Hudson Railroad Bulletin* (January 1, 1933, pp. 3, 11) we read: "For some time he kept a record of the cows killed by his engine as they stood placidly on the main line in the shade of box cars standing on one of the many curves. As this became a regular occurrence he soon tired of recording the individual happenings." (p. 11)

William Maloney, too, a D&H conductor in the Whitehall-Troy-Schenectady area ("Excitement and Adventure!," *The Delaware and Hudson Railroad Bulletin*, November 1, 1935, pp. 163-164) had problems with cows on the tracks. One night, as he was backing toward Schenectady with the caboose in front of the tender, he had a major encounter with a herd of cattle. In his biographical portrait we read: "A stray herd of cattle nearly cut short the 54-year railroading career of Conductor William Maloney one night many years ago. His crew, after bringing a freight train from Whitehall to Troy, was ordered to Mohawk to pick up a train of coal for the return trip. Backing toward Schenectady, with the caboose in front of the tender, Mr. Maloney was standing on the platform peering into the darkness when, at Ballston Lake, he saw the eyes and horns of a herd of cattle directly in front of him. When they struck the cattle the caboose was thrown around violently at right angles to the track, then toppled down the bank amid the mass of bawling cows. The tender was also derailed so they called the wreckers and waited for morning. When day dawned the tracks were strewn with dead cattle, but not a single member of the crew was injured." (p. 163)

On February 21, 1874, a cow and a yoke of oxen had run-ins with Gravity cars. The yoke of oxen got lucky:

"Widow Crawford's cow was killed by the light cars on Plane No. 18 Saturday morning. Saturday afternoon a train of twenty-four light cars ran into a yoke of cattle just as the train was leaving the head of Plane No. 2. The cars shoved the oxen a distance of nine rods, and then threw them down the embankment; although much bruised, no bones appeared to be broken, and the oxen wended their way homeward—a sadder if not wiser team." (*Honesdale Citizen*, February 26, 1874)

On August 11, 1874, two more cows were killed on railroad tracks—one on the Jefferson Branch of the Erie, and one on the D. & H. near Peckville:

“Cows upon Railroad Tracks. / The nuisance of suffering cows to run upon railroad tracks continues unabated. On Tuesday afternoon last, one was killed on the Jefferson RR. above town, and one on the D. & H. RR, near Peckville.” (*Carbondale Advance*, August 15, 1874, p. 3)

On October 5, 1874, an ox attacked a Gravity train in the vicinity of No. 4 D&H railroad:

"On Monday afternoon, F. B. Goodman, of Honesdale, purchased an ox, in the vicinity of No 4 D & H railroad. The drivers started with it toward town, when it got beyond their control near the loaded track. A train of cars just then made its appearance, and his ox-ship, not caring for such trifles, made a great rush for and attempted to throw the train off the rails. Like so many things in this life, it was a complete failure, and the animal was converted into mincemeat in less than a minute. Several cars were badly wrecked, but the runners escaped by jumping." (*Honesdale Citizen*, October 8, 1874)

In April 1883, William Rhodes, who lived near Keen's Pond, was killed by a train of loaded coal cars on the ten-mile level when he tried to chase a cow from the track. In the *Gravity Notes* that were published on page 3 of the April 20, 1883 issue of the *Carbondale Leader*, we read the following:

"A terrible and fatal accident occurred on the ten mile level, on Wednesday, by which William Rhodes lost his life. It seems that he was trying to drive a cow from the track when a loaded coal train came along, he being old and deaf did not hear it. The cars knocked him down injuring him so badly that he lived but an hour. He lived near Keen's Pond, and was highly respected by all who knew him. He was the father of Mrs. George Phillipi, of Carbondale."

In May of 1883, Hugh Fitzsimmons of No. 7 had two cows hit by Gravity cars on Plane No. 8 on the same day. In the *Gravity Notes* published in the *Carbondale Leader* of May 4, 1883, p. 3, we read the following:

"Hugh Fitzsimmons, of No. 7, had one cow killed and another injured on No. 8 plane, last Saturday."

In June of 1883, eleven light cars wrecked when a light train struck a cow near the powder mill:

"The last light train ran over a cow down at the powder mill last Monday night, wrecking 11 cars, but no one injured." (*Carbondale Leader*, *Gravity Notes*, June 22 1883, p. 3)

Regrettably, a very valuable cow owned by Edgar Smith was struck by the cars on Plane No. 1 in July 1883:

"Mr. Edgar Smith had a very valuable cow killed by the cars on No. 1 Plane, on Monday last." (*Carbondale Leader*, *Gravity Notes*, July 13, 1883, p. 2)

In July 1883, the cows that were running on the railroad "up on the hill" were put in a pound/enclosure by the railroad. The owners of those cows had the nerve to complain that their

cows were being locked up without being able to get a drink of water. The owners of the cows are missing the point, which is this: Keep your animals under control so that they don't damage the private property of others.

"There is a pound up here on the hill and many of the cows that run the road are put into it. Their owners do not object so much to having their cows pounded, but they do object to having them shut up where they cannot get a drink of water." (Carbondale Leader, *Gravity Notes*, July 27, 1883, p. 2)

Willis Andrews was killed in February 1884 on G level when he jumped from a moving train to drive some cattle from the track, stumbled, and fell and was run over by the cars and one leg was frightfully mangled. He died from the shock.

"Willis Andrews, head brakeman on Conductor Derrick's train, met with almost instant death on G level last Wednesday. He jumped from the moving train to drive some cattle from the track, and in some way stumbled and fell, and before he could regain his feet the cars were upon him. One leg was frightfully mangled and the shock was so great that he only lived a few moments after the accident. He was a single man about 21 years old. His parents live near Seelyville, Wayne county. He boarded with Mr. Darrick in Peckville." (Carbondale Leader, *Gravity Notes*, February 15, 1884, p. 2)

More animal problems on the D&H in September 1889: a cow causes an accident on the Gravity Railroad near the Wolcott quarry, and two horses attempt to cross the bridge which spans Laurel Run, just south of Archbald:

"ALMOST AN ACCIDENT. / A Cow Derails a Gravity Passenger Train—No Damage. / Accidents on the Gravity railroad rarely occur and passengers enter the little coaches with the assurance that a ride over the mountains is quite as safe as it is pleasant. Yesterday afternoon an accident actually took place, but the passengers knew nothing of the danger until the train came to a standstill. As Conductor Hubbard's train was nearing the Wolcott quarry two cows were discovered walking along the track and the train was slowed down before the animals could be driven from the road. Before the train was under way again and just as it rounded the curve in sight of No. 4 Pond, [emphasis added] a large cow stepped from the bushes which line the road directly in front of the running cars. / The head brakeman had barely time to grasp the wheel and signal down brakes before the animal was sprawling in the track. The forward truck was thrown from the rails and the baggage car started down the bank, but the brakeman held the coaches so steadily that the passengers were not even 'shaken up.' Two men in the baggage car received slight bruises. The brakeman on the front platform hung to the brake and escaped injury and the stupid cow that caused the accident walked off with a slight limp apparently little worse for the battering it had received. / Cattle and horses are allowed to roam at will by their owners and prove very annoying to engineers and brakeman who are compelled to keep a sharp lookout for track obstructions. On Saturday night two horses fell upon the track a short distance below

Archbald. The animals attempted to cross the bridge which spans Laurel Run. The bridge is not covered with plank and the horses fell between the cross ties and were unable to extricate themselves. A small boy happened along and realizing the danger he ran to the Archbald depot and told the operator what he had discovered. A telegram was sent to Peckville before the train reached that station and a terrible accident prevented.” (*Carbondale Leader*, October 1, 1889, p.4)

A remarkable confrontation took place at Honesdale on May 20, 1890 between a Texas steer, Louis Dein' butchers, and the Gravity Railroad. The steer, which for a time appeared to be the winner in the battle, was ultimately defeated. Here are the details, as published in the *Carbondale Leader* of May 24, 1890:

"STOPPED BY A BULL. / He Gets on a Rampage and Work on the Gravity Halts. / Work on the Gravity road in the vicinity of Honesdale was temporarily suspended last Tuesday, says the Honesdale Herald. It seems that Louis Dein' butchers, with the assistance of a rope and windlass, were persuading an immense Texas steer to enter their slaughter house just out of town. As soon as his nose entered the door, and he caught sight of some animals hanging around by their heels, he seemed to realize the object of their intentions. With a shivering snort and a Samsonian effort, he broke the ropes from his horns like a thread and was free. A moment later he saw the executioners, ropes in hand, closing about him. The first one he charged managed to get off the end of a short ladder fortunately leaning against the building as the steer dove into its foot. The ladder falling over onto the animal's back, became in some way fastened there by a mixture of horns and rungs, which accident but added to the wild fury that was fast possessing the brute. He first cut short the grins of one of the butchers, who tried to escape the onslaught by the foot bridge near at hand, by chasing him into the river. Leaving the butchers he went out of the yard; up the road until he was attracted by the hum of machinery at Foster's Factory. The work-men had the doors closed and barricaded in time, but the Texan, in his blind rage, fell into the deep, empty flume of the old tannery. Although this accident relieved him of the ladder, it added to his anger. He stoutly worked his way out of the flume and crossing the river espied a gang of D. & H. masons engaged in building a stone culvert under the highworks near by. The men saw him in time to collect together within the stone arch where they stood for a long time, up to their knees in water, watching the glaring bull with many misgivings as to his disposition and ability to follow them into their retreat. After showing his contempt for such skulking cowards by pawing an immense hole in the soft dirt, he rushed up the bank, and was soon heard prancing up and down on the trestle platform overhead. This would never do as trains or section of trains are coming in on the Gravity every few minutes so the foreman in charge ran across the little valley and up the track to signal approaching trains. The steer put after him, but evidently believing his mischief was checkmated in that quarter he dashed up the hill to the light track and trotted around the 'Horse Shoe,' looking apparently for the 3.30 passenger train going west. Some of the masons made a short cut up the hill in time to spoil that game, but the desperate animal, reaching the highworks where the egg coal is dumped down into the pockets, espied some men loading the cars at that point. With a fearful bellow as if to call attention to his act he tossed his head, lashed his tail and made a spring from the trestle down into the pockets a jump of little less

than fifty feet, right among the men. Fortunately no one was struck by him and the yielding coal so impeded his movements that the butchers, who had followed at a safe distance, all the way, were enabled to lasso him sufficiently to insure his ignominious return to the slaughter house, where, before this reaches our readers, he will probably have expiated his misdeeds." (*Carbondale Leader*, May 24, 1890, p. 3)

In October 7, 1899, a heifer somehow managed to get on a bridge near Pidgeon's Crossing and was struck by a passenger train and killed:

"STRUCK A COW. Early Morning Train Kills a Heifer Near Pidgeon's Crossing. About two o'clock this morning several of the residents near Pidgeon's crossing heard a cow bellowing as if in distress, and several poked their heads out of windows to see what the trouble was. Thomas Mooney, got up and dressed and taking his mining lamp started to investigate. Going upon the railroad bridge, he found a yearling heifer that had fallen through and seemed to be in distress. He could not get the animal out alone, and if he could have done so he did not have time, for a passenger train was approaching. He went down the track and attempted to stop the train, but to no avail. The engine struck the heifer knocking her off the bridge to the ground below, killing her instantly. The ownership of the animal is unknown. Mooney says there was a cow on the track also. If the cow had been on the bridge, it is thought the train or part of it would have been derailed." (*Carbondale Leader*, October 7, 1899, p. 5)

As is well known, the device that is mounted at the front of a locomotive to deflect obstacles, such as cows, on the track that might otherwise damage or derail the train is called the *pilot*, or *cowcatcher*. Shown below is a copy of a print from 1873 showing a nineteenth-century locomotive with a cowcatcher attached to the front.



Cowcatcher

Sheep

On November 20, 1879, a Gravity passenger train struck and killed a sheep at Keene's:

"Last Thursday morning, the Gravity train from Carbondale ran over and killed a sheep at Keene's. Fortunately the cars were not thrown off the track. The passengers, however, were somewhat frightened by the shaking up they received." (*Honesdale Citizen*, November 27, 1879)

Owney, the D&H Traveling Dog

And let's not forget about Owney, the celebrated D&H traveling dog (part Scots terrier, part Irish terrier, and part Airedale) who wandered into the Albany Post Office one day and was adopted by the mail clerks there. Owney used to ride in the mail trucks between the Albany Post Office and Union Station. One day, he hopped aboard a D&H mail car and rode to Carbondale. Owney soon became a regular feature of trains in New York and, one train leading to another, he ended up in Tacoma, WA, where he was put on the SS *Victoria*, just then sailing for Japan, and from Japan all the way around the world—in 132 days. Here is the remarkable story of the D&H traveling dog:

“D&H Traveling Dog Preserved For Posterity In Smithsonian / Joseph B. Sirianni’s inquiry concerning Owney, the traveling dog who began a world girdling career with a first trip from Albany to Carbondale via D&H mail car [in the 1890s], resulted in the shedding of printer’s ink not only in Carbondale but in Albany, too. / Charles L. Mooney, columnist for the *Albany Knickerbocker News*, devoted his Sept. 24 column to a review of the history of the dog who traveled not only cross-country but ‘round-world. He carries the narrative through to Owney’s death in old age and goes on to tell that death was not the end of the Owney story. / ‘His remains were stuffed and Owney reposes, to this day, in Smithsonian Institute,’ Mr. Mooney relates. / In opening his column Mr. Mooney says: ‘It’s a long time since Owney the Mail Dog hopped aboard a train to carry the name and fame of Albany to far corners of the world, but the fabulous canine has tongues wagging again in places as far apart as England and Carbondale, Pa. / ‘This column [Mr. Mooney’s] received a letter not long ago from Joseph B. Sirianni, a former Albany resident now living in Carbondale. He had been telling some new-found friends about Owney, he wrote, and the crowd thought he was spoofing them. Mr. Sirianni recalled that some years ago we wrote the story of Owney in this space [in the *Albany Knickerbocker News*], and asked if we could send him the column. / ‘Since we couldn’t locate the column we wrote Mr. Sirianni and filled him in on many details of Owney’s travels. [Many of those details were learned at that time by Mr. Mooney through Albany Mayor Erastus Corning, who reported to Mooney that Owney’s story is told in *Dogs and People* by George and Helen Papashvily.] The former Albanian [Sirianni] told a Carbondale newspaperman [what he learned from Mooney’s letter] who wrote a front page story for the *Carbondale Daily News*. It carried the heading: ‘D&H Traveling Canine No Myth, Says Veteran Albany Newsman.’/ [In that article in the *Carbondale Daily News*, Mooney states:] / ‘Owney often has been termed the world’s foremost homing dog. / ‘A little

fellow with traces of Scots terrier, Irish terrier and Airedale, he wandered into the Albany Post Office one day as a pup. The mail clerks promptly adopted him and presented him a collar bearing his name and address. / 'Owney used to ride the mail trucks between the Post Office and Union Station. One day, apparently with a desire for a longer ride, he hopped aboard a D&H mail car and rode to Carbondale. / 'Having made that run several times, Owney changed trains one day, traveled over several railroads and returned to Albany with souvenirs attached to his collar, attesting to the fact that he had been to the West Coast. / 'August 19, 1895, Owney's postal pals packed a light bag for him with his brush, comb and blanket and a letter of introduction to postal authorities everywhere. With the little bag hanging from his collar, Owney was off. / 'He reached Tacoma and some one there put him on the SS Victoria, just sailing for Japan. Folks in Tokyo had never heard of Owney, but his letter of introduction sufficed for him to be 'received' by a representative of the Mikado, who gave him a special seal. / 'From Japan Owney sailed to Shanghai, Singapore and Port Said, stopped off for a visit in Gibraltar and the Azores and trotted into the Albany Post Office on Dec. 23, having circled the globe in 132 days. / 'Owney collected so many trinkets, medals and coins in his travels that Rodman Wanamaker, then the postmaster-general, ordered a special harness constructed for him,' Mr. Mooney relates [in his article in the Sept. 24 issue of the *Albany Knickerbocker News*]. (*Carbondale Daily News*, October 1, 1959, p. 1; clipping in Frank and Kitty Kelly scrapbook)

Owney died in 1897, and his body was preserved by taxidermy.

Owney was kept on display at the U.S. Post Office Department in Washington, DC until 1912, when he was donated to the Smithsonian.

In 1993 he was moved to the new National Postal Museum.

In 2009, the National Postal Museum decided to create a new Owney exhibit. Before being put on display, Owney was restored by taxidermist Paul Rhymer.

In July 2011, the U. S. Postal Service issued a postage stamp with Owney's image thereon.

Here is the story on Owney that was published in the September 2011 issue (p. 35) of *Smithsonian* magazine:

Mail Pooch

For nine years, Owney rode the rails and the wagons on top of mailbags. Today, a stamp honors his odd service as the mascot of the mailmen

HE WAS ONE OF the most recognized celebrities of the late 19th century. Born of humble beginnings, he made frequent public appearances alongside those of noble lineage. He traveled the nation, receiving medals and gifts wherever he went. Later he toured the world as a goodwill ambassador.

Today, a new exhibit at the National Postal Museum is dedicated to the life and achievements of Owney, the terrier-mix dog who served nine years as the unofficial mascot of the U.S. Railway Mail Service.

"One of the reasons he was so popular is that he was this scruffy mutt who achieved way beyond his stature," says museum curator Nancy Pope.

Owney began his public service career in 1888, after his owner—a postal clerk in Albany, New York—abandoned him. The other clerks took him into their care and Owney bided his time, sleeping on mailbags. When the mailbags moved—first to the mail wagon and then to the railway station—Owney went with them. At first, the four-legged postal carrier rode local trains, but he eventually traveled throughout the United States.

As newspapers began chronicling his travels in the early 1890s, Owney's fame grew. The clerks outfitted their mascot with a collar, which accumulated medals and tags with each city he visited. When there were too many tags to fit on the collar, Postmaster General John Wanamaker gave Owney a harness for them. He became a popular special guest at dog shows and, in 1895, he embarked on a 129-day "Around the World" publicity tour aboard the Northern Pacific mail steamer *Victoria*.

The biographies of famous public figures are often embellished, and Owney was no exception. So, in 2009, when the National Postal Museum decided to create a new Owney exhibit, Pope, with the help of then museum intern Rachel Barclay, researched an exhaustive history of Owney's life and travels—combing through newspaper articles and railroad maps, as well as the tags and medals Owney received when riding the rails. Sure enough, they debunked some myths, including that Owney was a stray who had wandered cold and hungry into the Albany post office one night.



"It really is a miracle that he came in as good shape as he did," says taxidermist Paul Rhymer, who spent a month carrying out Owney's first restoration since he went on display.

While the mascot's actual age was never known, by 1897 he had become old, ill and crotchety. After he bit a mail clerk, a deputy U.S. marshal was sent to investigate; Owney tried to attack him and was fatally shot. Mail clerks raised money to have his body preserved by taxidermy. His mortal remains were kept on display at the U.S. Post Office Department headquarters in Washington, D.C. until he was donated to the Smithsonian Institution in 1912. Owney was moved to the Postal Museum when it opened in 1993.

For the new exhibit, Pope and museum conservator Linda Edquist wanted Owney to look his best, so they sent him to taxidermist Paul Rhymer. "It really is a miracle that he came in as good shape as he did," Rhymer says. It took him a month to complete the canine's first major restoration in his years on display. (During his absence, the museum made do with a stand-in, dubbed "Phony Owney.")

This past July, the U.S. Postal Service honored its fallen colleague with a stamp bearing his scruffy visage. An online book published by the museum will help bring Owney's story to a new generation.

"In history, we deal with humans and big events," says Pope, "[so] to study and chronicle the life of a dog is really not something I signed up for when I started doing history work. And it's just been tons of fun." **ARCYNIA ALI CHILDS**

See more pictures of Owney, his tags and his travels at Smithsonian.com/owney

SEPTEMBER 2011 • SMITHSONIAN.COM 35

Here is the postage stamp that was created by the U. S. Postal Service in honor of Owney, the celebrated D&H traveling dog:



And finally...(in the animal department):

Panthers

There were panthers at *Panther Buff* as late as 1884:

"A catamount [mountain lion] was shot yesterday on the long 'Straight Line' below Shepherd's crook." (*Carbondale Leader*, November 14, 1884, p. 1).

In September 1897, a D&H fireman was attacked, near Vandling, by a catamount:

"George Arthur, a fireman for the D & H Canal Co., near Vandling, formerly of Dyberry, had a thrilling experience last week which he does not long to have repeated. After attending to his fires and noting that everything was all right, he stepped outside the building to enjoy the balmy breezes of the wood. A sudden rustling of the bushes attracted the young man's attention, when a large catamount* sprang out and alighted on his shoulders, preparatory to having a good square meal. A number of berry pickers, hearing the alarm, ran to his assistance and with hard fighting killed the beast. Its weight was 120 pounds. Mr. Arthur intends to take the skin of a taxidermist to have it stuffed." (*Wayne Independent*, September 15, 1897)

*The cougar (*Felis concolor*), also commonly known as the mountain lion, puma, or catamount, is a large felid of the subfamily Felinae native to the Americas. Its range,

from the Canadian Yukon to the southern Andes of South America, is the greatest of any large wild terrestrial mammal in the Western Hemisphere. The cougar, which can purr but cannot roar, is an excellent jumper, climber, and swimmer. It is an ambush predator and pursues a wide variety of prey. This cat prefers habitats with dense underbrush and rocky areas for stalking, but can also live in open areas.



Catamount

7023

Account Arrival & Departure of Boats 1832
May-June 1832

Delaware and Hudson Canal, Honesdale, PA to Rondout, NY

This Delaware and Hudson Canal Company logbook, *Account Arrival & Departure of Boats 1832*, was found in a box of “junk,” so called, that was given to the Carbondale Historical Society / Carbondale Delaware and Hudson Transportation Museum in June 2010.

On August 15, 2010, electronic copies of this extraordinary logbook were presented to all members of the Delaware and Hudson Transportation Heritage Council by the Carbondale Historical Society and the Delaware and Hudson Transportation Museum.

When this remarkable account book is studied in detail, our knowledge of the early history of the Delaware and Hudson Canal will surely be enriched.

Given below are May-June 1832 from this ledger.

July-August 1832 will be presented in Volume VIII in this series.

September-October 1832 will be presented in Volume IX in this series.

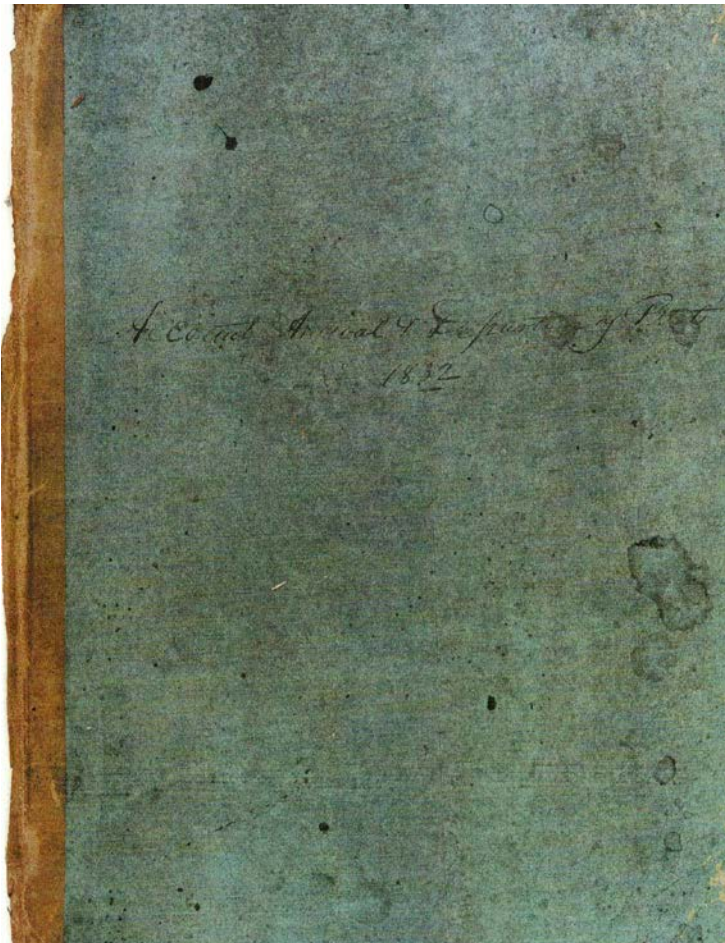
November-December 1832 will be presented in Volume X in this series.

Canal Boat Names:

Nineteenth-century handwriting is not always easy to read. To complicate matters, in the present endeavor, some D&H boat captains/owners gave their boats remarkably unusual names, as we learn from the following article that was published in the *Wayne Citizen* of November 10, 1870:

"The following are a few of the names of canal boats that run on the Del & Hud Canal line to Honesdale. The names are certainly original: *Gumbilical*, *Cowakaoloneous*, *Slouchie*, *Caripperdus*, *Hippopolimpus*, *Bubblescum*, *Ragtag*, *Gehosseous*, *Calapical*, *Snortie*, *Wafter*, *Gondola de anthracite*, *Merry Made*, *Skedunk*, *Lockmasher*, *Rippeerip*, *Miss N. Till*, *Tiddeuscum*, *Ditchwallower*, *Gingulper*, *Floater for stamps*."

Front cover of
***Account
Arrival &
Departure of
Boats 1832***



The D&H
Canal opened
on May 8, 1832

Account Arrival & Departure of Boats 1832

May	8	Boat V. 49. Adria & Lejore	Coals 11 Mus. to New York	29 00
"	"	Lethe Bradish - J. B. B. Miller	Glasp 7 ²	2000 \$ 53.25
11	"	Eliza - Wm. McFarland	Glasp 2	08.26 227.222
"	"	Maple - Lestie Hoar	Coals	29 00
"	"	Cornelia - Leonard Van Dr Belt	"	29 00
"	"	11 - James Puddy	13 Tons. Tonnage Boats Paupack	\$ 2.21
"	"	Maple - Lestie Hoar	505 fat Round Paupack	8
12	"	63 - Patrick Kelly	Coals	29 00
"	"	55 - Peter Blauhaus	without C. Lading	3 35
"	"	Rover - Th. B. Scott	"	3 35
14	"	25 - Abijah Korday	Coals	29 00
"	"	85 - Pileg	Transon 6 ft to 1/2 in. Coal to North 2 1/2	29 00
"	"	88 - Peter Blauhaus	Mon. from to White m. 2 1/2	29 00
"	"	Booy - Th. B. Scott	Coals 1/2 ft. fine coal 2 1/2	29 00
"	"	27 - James D. Smith	"	29 00
"	"	98 - Rich. Jackson	"	29 00
"	"	67 - Rich. Jackson	"	29 00
"	"	Columbus J. D. Schoonmaker	"	29 00
"	"	Franklin J. D. Schoonmaker	"	29 00
"	"	N. 67 - Rich. Jackson	without C. Lading	3 35
"	"	98 - Rich. Jackson	18 1/2 Tons 2 tons 15 lbs	3 35
"	"	Franklin J. D. Schoonmaker	from P. Jackson to 18 1/2	3 35
"	"	Columbus J. D. Schoonmaker	from " to 18 1/2	3 35
15	"	N. 42 - Moses Kortright	Coals	29 00
"	"	26 - J. C. Long	"	26 00
16	"	107 - John Longyear	11 1/2 tons 1/2 ft. to White m. 1 1/2	30 00
17	"	Collins John Mersford	Coals	30 00
"	"	Ingin - Th. A. K. Welleson	"	15 00
"	"	50 - John A. Campbell	"	29 00
"	"	6 - John Cleamater	"	30 00
"	"	83 - Fredk. R. Marshall	16 1/2 tons 1/2 ft. to White m. 1 1/2	30 00
"	"	80 - Fredk. R. Marshall	"	30 00
"	"	92 - Caleb Prich	"	30 00
"	"	115 - Humphreys	"	30
"	"	96 - Josiah Warner	"	30 00
"	"	123 - David Evans	"	30 00

Account Arrival & Departure of Vessels 1832

1832				
May 17	Boat	Phillip Kane - Calab. Elmer	Coal	29 00
"	"	N ^o 68 J. Warner	Coal	29 00
"	"	" 94 David Snyder	"	29 00
"	"	" 89 David Snyder	"	29 00
"	"	Connecticut J. Warner	"	29 00
"	"	N ^o 66 Aaron Tracy	"	29 00
"	"	" 106 Phillip Van Keenan	"	29 00
"	"	Albin - Brough Markle	"	29 00
"	"	Geo. Hammett Sila. Simpson	"	30 00
"	"	N ^o 127 James J. M. Cue	"	30 00
"	"	" 128 James J. M. Cue	"	30 00
"	"	" 122 James J. M. Cue	"	30 00
"	"	" 124 Jacob J. Vesper	"	30 00
"	"	" 133 Leonard L. Corbett	"	30
"	"	" 130 G. W. Eadecott	" 136 John W. Eadecott	30
"	"	" 16 Aaron Tracy	Coal	30
"	"	Speedwell G. W. Eadecott	" 136 John W. Eadecott	30
"	"	" 1325 Robert J. Hoar	Without C. Eadecott	
"	"	Collins John Minfist	"	
"	"	" 350 John J. Campbell	"	
"	"	" 83 Charles Marshall	"	
"	"	" 80 Ditto	"	
"	"	" 113. Craft J. Hoar	"	
"	"	Phillip Kane C. Elmer	"	
"	"	" 89 David Snyder	" 28 1/2 R. Hoar Wharf	
"	"	" 94 Capt. Snyder	" 28 1/2 R. Hoar Wharf	
"	"	" 90 John J. Warner	" 28 1/2 R. Hoar Wharf	
"	"	Connet	Ditto	
"	"	" 112	Ditto	
"	"	" 6	John Clearcut	34 1/2
"	"	" 100	Luman W. Wood	30. Ca. Wheel
"	"	" 100	P. Van Keenan	Without C. Eadecott
"	"	" 123	David Evans	"
"	"	" 2	Peter W. Park	"
"	"	" 122	James J. M. Cue	"
"	"	" 127	James J. M. Cue	"

Account of Arrival & Departure of Boats 1832

May 17	Boat No 128	James J. McCue without Co. Lading	
"	"	Albion Conn. Kirtright from Ellen Vile	"
"	No. 133.	L. S. Constant	"
"	"	60. Anna Frey	"
"	"	131. C. E. Schoonmaker & Co. N.Y. Mer	17.6.2
"	"	118. J. DeKeyser without Co. Lading	"
"	"	73. Fred. Moul	"
"	"	16. Anna Frey 22 R. B. Carr	Whale
"	"	Specimen of Beryl Despatch 2000 Pounds for J. B. W.	
"	"	68. J. Warner 10 R. B. W. 25. R. B. W. 25. R. B. W. 25.	
"	"	8 R. B. W. 25. R. B. W. 25. R. B. W. 25. R. B. W. 25.	
"	"	Genl. Van der Venter. Schuyler without Co. Lading	
"	"	President - A. D. Van Wageningen	"
"	"	7. Levi Slats	"
"	"	124. Jacob Schuyler	"
"	"	114. James J. Rogers	"
"	"	United States - Isaac Davenport	"
"	"	No. 34. Simon Groat	"
"	"	60. John Longy & Co. N.Y. Mer	21.0.2.20
"	"	126. D. Cutler without Co. Lading	"
"	"	131. C. E. Schoonmaker Coal	30
"	"	2. Peter H. Barks	"
"	"	118. George Schuyler	30
"	"	President A. D. Van Wageningen	30
"	"	No. 7. Levi Slats	30
"	"	United States - Isaac Davenport	30
"	"	No. 114. James J. Rogers	30
"	"	73. Fred. Moul	30
"	"	126. D. Cutler	30
"	"	34. Simon Groat	30
"	"	118. George Schuyler	30
"	"	60. John Longy & Co. N.Y. Mer	30
"	"	14. C. B. Van Wageningen	30
"	"	5. C. L. Addison	30
"	"	95. Maria G. Gorington	30
"	"	40. D. J. Schuyler	30

Account of Arrival & Departure of Boats 1832

1832	May 18	Boat Elm Night Fair	Wagon I. Moore	Nº 9. Me 17.0.30
"	"	"	Nº 95. Mr. C. Goddington	without C. Lading
"	"	"	5. C. L. Alder	"
"	"	"	43. John Hammet	"
"	"	"	14. Ch. W. Mayne	"
19	"	"	30. Tho. Van Wagener	Coal 30
"	"	"	78. James R. Park	" 30
"	"	"	105. Solomon Green	" 30
"	"	"	1. J. B. Bilmire	through water mile 30
"	"	"	43. John Hammet	1 mile for 1 hour 30
"	"	"	93. Jeph. Whitney	Nº 43. Me 15.5.3
"	"	"	116. Jeph. Whitney	" 42 " 16.14.1 30
"	"	"	105. F. Morris	from Ellen Hill Pennsylvania 30
"	"	"	30. Tho. Van Wagener	to New York 30
"	"	"	78. James R. Park	to Pennsylvania 30
21	"	"	91. Adam S. Leferre	Coal 30
"	"	"	86. Elias J. Root	" 29
"	"	"	55. D. P. Schuyler	from New York 29
"	"	"	55. D. P. Schuyler	Nº 53. Me 11.16.2 29
"	"	"	93. Jeph. Whitney	Coal 29
"	"	"	116. Jeph. Whitney	" 29
22	"	"	Malpkill. George Dorrance	Nº 59. Me 25.3.2.0
"	"	"	Nº 04. S. H. Dours	Coal 29
"	"	"	46. Tho. J. Stokes	" 29
"	"	"	54. Jerk J. Clow	" 29
"	"	"	126. W. Salpaugh	" 29
"	"	"	54. Jerk J. Clow	Nº 58. Me 21.12.1
"	"	"	70. G. D. Merritt	without C. Lading
"	"	"	120. W. Salpaugh	Me 1.16. 6.8.00 29
"	"	"	104. J. H. Dours	without C. Lading 10
"	"	"	46. Tho. J. Stokes	without C. " 50
"	"	"	105. George Dorrance	"
"	"	"	87. D. Cutler	" 29
23	"	"	87. D. Cutler	Coal 30
"	"	"	105. George Dorrance	to New York 30
"	"	"	11. James Parby	Coal 30
"	"	"	3 Box to New York	to New York 30

Account of Arrival & Departure of Boats 1832

1832				
May 23	Boat #108	Josh McMillen	Coal	30
"	"	84. John A. Burt	"	30
"	"	84. John A. Burt	without C. Lading	30
"	"	99. Josh McMillen	Coal	30
"	"	79. Henry M. Wood	Coal	30
"	"	99. Josh McMillen	1063. May 15. 17. 1	
"	"	90. Josh J. Clary	1063. May 21. 12. 0	
"	"	108. Josh McMillen	without C. Lading	30
"	"	23. Anna Ingraham	"	30
"	"	101. Abm Rice	"	30
"	"	62. Lewis Garkner	"	30
"	"	102. Lewis Garkner	"	30
"	"	79. Henry M. Wood	"	30
"	"	Clinton John C. Debris	"	30
24	"	23. Anna Ingraham	Coal	30
"	"	90. Josh J. Clary	1 Cask Whiskey to Mott	30
"	"	108. Abm Rice	"	30
"	"	117. Corn. J. Dubois	"	30
"	"	62. Lewis Garkner	"	30
"	"	102. Lewis Garkner	"	30
"	"	33. John Whitchey	"	30
"	"	8. Joshua Norway	"	30
"	"	77. Abm Rice	"	30
"	"	33. John Whitchey	without C. Lading	30
"	"	8. Joshua Norway	"	30
"	"	97. Abm Rice	"	30
"	"	77. Abm Rice	"	30
"	"	45. Moss Coles	"	30
"	"	53. Tho. Van Wagner	"	30
"	"	19. John Elzy	"	30
25	"	97. Abm Rice	Coal	30
"	"	45. Moss Coles	"	30
"	"	53. Tho. Van Wagner	"	30
"	"	19. John Elzy	"	30
"	"	9. Ruff. J. Rausman	"	30
"	"	3. John P. Davis	"	30
"	"	18. Mr. Crozier	without C. Lading	30

Account of Arrival & Departure of Boats 1832

[illegible]

Account of Arrivals & Departure of Boats 1832

1832	May 28	Boat N ^o 27	J. D. Smith without C ^o Lading	
	"	"	15. W. W. Ditz	187
	"	"	37- D. C. Smith	"
	"	"	Commerce M ^o Van Dribbitt	"
	"	"	N ^o 55- F. B. Marshall	"
	"	"	" 88- John Blackburn	"
	"	"	" 65- Josiah Warner	"
	"	"	Franklin J. D. Schoonmaker	"
	"	"	N ^o 89- David Snyder	"
	"	"	Columbus J. D. Schoonmaker	"
	"	"	N ^o 39- Jonathan Craig	"
	"	"	Eliza- David M ^o Fairland N ^o 112	May 14 18.3.8
	"	"	Leitha M ^o Smith N ^o 133	May 15 19.0.0
29	"	"	63 Josiah Warner	Coal 30
	"	"	64- Rich ^d Blackburn	" 30
	"	"	89- David Snyder	" 30
	"	"	Columbus J. D. Schoonmaker	" 30
	"	"	Franklin J. D. Schoonmaker	" 30
	"	"	N ^o 39- Jonathan Craig	" 30
	"	"	" 88- John Blackburn	" 30
	"	"	" 65- Aaron Frey	" 30
	"	"	" 16- Aaron Frey	" 30
	"	"	Cousin Josiah Warner	" 30
	"	"	Collins John Winfield	" 30
	"	"	N ^o 66- Aaron Frey without C ^o Lading	
	"	"	" 16- Aaron Frey	
	"	"	Cousin Josiah Warner	
	"	"	Collins John Winfield	
	"	"	100- Philip Van Kuren	"
	"	"	100- Ditto	Coal 30
	"	"	25- Elijah Loden	" 30
	"	"	L. Bradish John A. Loden N ^o 46 247.2.15	May 15 14.0.0
	"	"	85- Philip Ransom without C ^o Lading	55.75
	"	"	124- Jacob T. Loden	81.18
	"	"	25- Elijah Loden	85.87.2
	"	"	94- David Snyder N ^o 140	May 21 15.1.0
	"	"	44- J. P. Kelly	without C ^o Lading

Account of Arrival & Departure of Boats, 1832

May 30	Boat N ^o 85. Felix Praunm	Coal	30
"	" 124 Jacob I. Sigars	"	30
"	" 44 J. P. Kelly Steamer line to Northboro	40 ⁰⁰	30
"	" 112 Josiah Warner	68 ⁰⁰ - 70 ⁰⁰ - 72 ⁰⁰	30
May 31	" 9 th Dan ^l May Jr. 25 th Boat to, & via 24 th	70 ⁰⁰	30
"	Eliza Edmond Murray N ^o 5 - Glastonbury	57.72	

May 31, 1832

Account of Arrival & Departure of Boats 1832

June 2, 1832

1832	June 2,	Boat Row F B Scott without C ^o Lading	28
"	"	36 - John Cleaver	"
"	"	6 - John Cleaver	"
"	"	Philip Hare - C. Elmer	"
"	"	130 - Luman B Wood	"
"	"	Albin - Corn ^o Kortright	"
"	"	131 - James Douglass	"
"	"	96 - Mrs Snow	"
"	"	34 - Virgins Grant	"
"	"	Virgil Mr. H. Kewitzger	"
"	"	123 - David Evans No. 189 Mrs 35.5.0.0	"
"	"	24 - Ender Smith	"
"	"	26 - J. J. Glover	"
"	"	32 - James David	"
"	"	103 - Fred Mackie	"
"	"	Row F. B. Scott Coal	30
"	"	111 - Brough Geo	30
"	"	6 - John Cleaver	30
"	"	Philip Hare - C. Elmer	30
"	"	130 - Luman B. Wood	30
"	"	Albin Corn ^o Kortright	30
"	"	131 - James Douglass	30
"	"	36 - John Cleaver	30
"	"	2 - Peter Fr. Bask without C ^o Lading	"
"	"	121 Peter Fr. Bask	"
"	"	95 Mrs C. Goodington	"
"	"	United States Isaac Davenport	"
"	"	114 - J. J. Regan	"
"	"	126 - David Cutler	"
"	"	115 - L. Simpkins	"
"	"	Mrs - J. D. Van Wagner	"
"	"	Pres ^t - J. D. Van Wagner	"
"	"	No. 30 - John Campbell	"
4	"	123 - David Evans Coal	30
"	"	122 James J. Mc without C ^o Lading	"
"	"	127 James J. Mc Lues	"
"	"	128 Ditto	"

Account of Arrival & Departure of Boats 1832

1832				
June 4	Boat N. 40	Brookhead Dubois without C. Lading		
	"	" 118. G. J. Schert	"	
	"	" 133. Leonard L. Constant	"	
	"	" 73. Fredericks Moxle	"	
	"	" 104. J. Rich	"	12
x	"	" 91. Adam S. Leferre	"	12
	"	" 43. John Karamide	"	
	"	" 107. J. Longyear June 27. 1832		
	"	" 118. G. J. Schert	Coals	30
	"	" 14. Chas. B. V. Waqum without C. Lading		
	"	" 87. David Cullen	"	
	"	" 17. Young M. Wood	"	
	"	" 108. J. C. H. Mullen	"	
	"	" 54. J. C. H. Mullen	"	12
x	"	" 46. Tho. S. Foraker	"	12
	"	" 116. J. C. H. Mullen	"	
	"	" 93. J. C. H. Mullen	"	
	"	" 58. Chas. M. C. J. J. J.	"	12
	"	" 55. D. P. Schuyler	"	12
	"	" 89. Joel H. Mullen	"	12
x	"	" 105. George Dorrance	"	12
	"	" 30. S. Van Wagum	Coals	30
	"	" 46. Tho. S. Foraker	Coals	30
	"	" 54. J. C. H. Mullen	Coals	30
	"	" 91. Adam S. Leferre	"	30
June 5	"	" 53. Tho. S. Foraker	"	30
	"	" 108. J. C. H. Mullen	"	30
	"	" 78. James B. Bush	"	30
	"	" 40. D. P. Schuyler	"	30
	"	" 74. Chas. M. C. J. J.	"	30
	"	" 55. D. P. Schuyler	"	30
	"	" 41. Brookhead Dubois	Coals	30
	"	" 133. Leonard L. Constant	"	30
	"	" 73. Fredericks Moxle	"	30

Account of Arrival & Departure of Boats 1832

1832

June 5	Boat No. 104. David Rich	Coal	30
"	" 43. John Haunisch	"	30
"	" 99. Joel H. Miller	"	30
"	" 93. John H. Miller	"	30
"	" 116. Jesse Whiting	"	30
"	" 14. Chas. B. Van Vorst	"	30
"	Spec. McC. C. Schoonmaker	as Sunday, through to it arrived 10 th	30
"	David Scott, Chas. J. Morris	No. 2. Lumber & 2 nd 4 th 7 th	30
"	No. 101. Abm. Price	Coal	30
"	" 3. John P. Davis	"	30
"	" 107. J. Langgier Junr.	"	30
"	" 105. George Dorrance	"	30
"	" 58. Chas. M. Carter	"	30
"	" 101. Abm. Price	without C. Lading	30
"	" 90. J. J. Glover	No. 207. Mch. 17. 3. 2	30
"	" 3. John P. Davis	without C. Lading	30
"	" 25. A. Ingraham	"	30
"	" 8. Joshua Koryan	"	30
"	" 77. Abm. Price	"	30
"	" 97. Abm. Price	"	30
"	" 67. Richard Jackson	"	30
"	" 98. Richard Jackson	"	30
"	Clinton John E. Dubois	"	30
"	No. 102. Levi Gashier	"	30
"	" 62. Levi Gashier	"	30
"	" 120. Mr. Valpangh	"	30
"	" 11. James Farley	"	30
"	" 60. John Langgier	No. 194. Mch 24. 12. 2. 0	30
"	" 33. John Whitting	without C. Lading	30
"	" 7. Levi Hata	"	30
"	" 86. Elias J. Hunt	"	30
"	" 8. Joshua Koryan	as Sunday, through to it arrived 10 th	30
"	" 25. A. Ingraham	"	30
"	" 77. Abm. Price	"	30
"	" 120. Mr. Valpangh	"	30
"	" 67. Richard Jackson	"	30
"	" 98. Richard Jackson	"	30

Account of Arrival & Departure of Boats 1842

June	Boat No. 97	Abner Brew	Coal	30
"	"	Clinton John C. Dobois	"	30
"	"	N ^o 62 - Levi Gathers	18 lb. City to Des Moines	30
"	"	102 - Ditto	"	30
"	"	57 - Levi Stacey	"	30
"	"	7 - Levi Stacey	"	30
"	"	33 - John Whitaker	"	30
"	"	84 - John A. Post	"	30
"	"	Oliver Branch John C. Decker	"	30
"	"	60 - John Longyear	"	30
"	"	57 - Oliver Stacey without C ^o Landing	"	30
"	"	84 - John A. Post	"	30
"	"	Oliver Branch John C. Decker	"	30
"	"	52 - Lewis Miller	"	30
"	"	45 - Moss Gale	"	30
"	"	Godthardt Tho ^s Newcomb	"	30
"	"	N ^o 47 - Tho ^s Newcomb	"	30
"	"	79 - H. M. Wood	"	30
"	"	69 - David Woolley	"	30
"	"	1 - J. B. Bidwell N ^o 204. Nov 19. 2. 2. 0. 25	"	30
7	"	47 - Tho ^s Newcomb	Coal	30
"	"	Don'tat Wige Stacey N ^o 18 from Elm Hill 2. 2. 4	"	30
"	"	Don'tat Ditto N ^o 4. Lumber	"	30
"	"	45 - Moss Gale	Coal	30
"	"	52 - Lewis Miller	"	30
"	"	36 - Elias J. Post	"	30
"	"	79 - Henry M. Wood	"	30
"	"	69 - David Woolley	"	30
"	"	19 - John Elmyre	"	30
"	"	1 - Jacob B. Bidwell	"	30
"	"	69 - John Elmyre 4 Casks oil for Camp	"	30
8	"	109 - Joseph Brown	Without C ^o Landing	30
"	"	57 - John L. Davis	Coal	30
"	"	109 - Joseph Brown	"	30
"	"	125 - Rob ^t J. Hoos	"	30
"	"	61 - Jacob S. Davis	"	30

1832 Account of Arrival & Departure of Boats

June 8	Boat N ^o 61. Jacob. I. Davis N ^o 77. Mice 1.3.2.0	
"	" 125- Robert J. Coor without C. Lading	
"	" 37. James D. Smith	pl
"	" 27. James D. Smith	pl
"	" 38. Bruff A. Meale	pl
"	" 76. Ch ^r B. Van Wageningen	
"	" 48. W. Cooper	
"	" 48. Mrs Crozier	
"	" 49. Adam J. Lefer	
"	" 9. Bruff J. Blankens	
"	Columbus John D. Schoonmaker	
"	Franklin J. D. Schoonmaker	
9	" N ^o 77. James D. Smith Coal	30
"	" 37	30
"	" 38 Bruff A. Meale	30
"	" 76 Ch ^r B. Van Wageningen	30
"	" 29. Mrs Crozier without C. Lading	
"	" 9. Bruff J. Blankens Coal	30
"	" 29. Mrs Crozier	30
"	" 48. Mrs Crozier	30
"	" 49. Bruff J. Blankens	30
"	125- Robert J. Coor without C. Lading	
"	Columbus J. D. Schoonmaker	30
"	" 48. James D. Smith	30
"	Franklin J. D. Schoonmaker	30
"	" N ^o 59. Dan ^l Sanders Jun ^r	30
"	" 100 Philip Van Kester	30
"	" 28. Mrs N. Dietz	30
"	" 16. Aaron Gray	30
"	" 16. Aaron Gray	30
"	Mate ^r Peter Kous	30
"	" N ^o 106 J. Hoag	30
"	" 15. Mrs N. Dietz	30
"	" 18. Josiah Martin	30
"	" 89. Dea ^r M. J. J. J.	30
"	" 100. Philip Kous without C. Lading	
"	" 28. Mrs Dietz	

$$\begin{array}{r} 40.16 \\ 20. \\ 10. \\ \hline 37\frac{1}{2} \\ 18\frac{3}{4} \\ 4 \\ \hline 30.60\frac{1}{4} \end{array}$$

$$\begin{array}{r} 30.16 \\ 15 \\ \hline 40.16 \end{array}$$

$$\begin{array}{r} 40.16 \\ 20 \\ \hline 20.16 \end{array}$$

United States

United States of

15

David Clutter 105 ft. from D.A. 6.0.0
 Leary
 Woodly Hill — 12.00.00
 Napoleon — 20 — 10.0.0.0
 Thistle 19.00.00 — 10.0.0.0

Account of Arrival & Departure of Boats 1832.

June 9 th	Boat No. 59. Daniel Landers without C ^o Lading	48
"	" 16. Solomon Gray	199
"	" 66. Aaron Gray	
"	Master John Hays No. 31. Mice	13.5.10
"	No. 106. J. Hoag	
"	" 68. J. Bond. Warner	
"	" 15. Wm. W. Deets	
"	" 89. David Gray	
"	" 64. Nick. Blaushaw	
"	" 88. John Blaushaw	
"	" 4. E. L. Morris	
"	" 65. John Carter	
"	" 71. Fred. K. B. Marshall	
"	" 83. John Blaushaw	82
"	" 80. Fred. K. B. Marshall	84
"	" Collier John Winfield	
"	" 39. Jon ^a Craig	
"	" 110. Joel H. Miley No. 30. Mice	7.0.1
"	" 88. John Blaushaw Coal	30
"	" 64. Nick. Blaushaw	30
"	Course. M. Skill. Donald No. 11. Empty Boat	20
"	Course Ditto No. 5. Lumber	33.14
"	Course Ditto No. 26. Mice 25.7.0.0	
"	Course Ditto No. 21. David Shuler	
"	" 4. Gilbert Morris Coal	30
"	" 81. Seth Sherrard hundred lbs. Sugar	30
"	" 65. John Carter	30
"	" 39. Jon ^a Craig 2 empty oil casks for cargo.	30
"	" 80. Fred. K. B. Marshall Coal	30
"	" 83. Ditto	30
"	" 71. Ditto	30
"	Collier John Winfield 300 feet Daily 100 lbs. to 1000 lbs. Sugar	30
"	" 110. Joel H. Miley Coal	30
"	Course M. Van Der Velt No. 45. Mice	30
"	Ditto W. Van Der Velt No. 45. Mice	24.12.2.0
"	No. 42. Mox. R. Wright Coal	30

Account of Arrival & Departure of Boats 1832

June 14	Boat No 34	Simon Groot without C. Ladiz	
"	" 44	J. P. Kelly	"
"	" 130	Endicott Mansfield	"
"	" 85	John Clearwater	"
"	" 36	John Clearwater	"
"	" 6	John Clearwater	"
"	" 20	Wm. B. Davenport	"
15	" 130	Endicott Mansfield	Coal 30
"	" 24	Easton Smith	" 30
"	" 20	Wm. B. Davenport	" 30
"	" 6	John Clearwater	" 30
"	" 85	John Clearwater	" 30
"	" 36	John Clearwater	" 30
"	" 104	J. Rich	" 30
"	" 43	John Hammill	" 30
"	"	Maurice Mott - C. Elmer	" 30
"	"	Philip Hone C. Elmer	" 30
"	" No 91	Adam Lefevre	" 30
"	" 72	J. H. Hermance 100 th Port St. Paul 1832	" 30
"	" 122	James J. M. Coe	Coal 30
"	" 127	James J. M. Coe	" 30
"	" 128	James J. M. Coe	" 30
"	" 24	Easton Smith without C. Ladiz	
"	" 43	John Hammill	"
"	" 104	J. Rich	"
"	"	Maurice Mott - C. Elmer	"
"	"	Philip Hone C. Elmer	"
"	" No 91	A. J. Lefevre	"
"	" 122	James J. M. Coe	"
"	" 127	James J. M. Coe	"
"	" 128	James J. M. Coe	"
"	" 92	Caleb Rich	"
"	" 74	C. P. Mc Intee No 95. Mr. S. F. 22 490	"
"	" 30	Thos. Van Wagner	"
"	" 108	Joseph Miller	"
"	" 32	Ed. Dander	"
"	" 87	David Cutler	"

Account of Arrival & Departure of Boat 1832

June 15 th	Boat No 17. Comd. J. Dubois No 85. Mar 21. 1832	
— " —	126 David Lutter without C. Lading	
— " —	Orphan Boy Ch. Mc Intee	
16	— " Orphan Boy Ch. Mc Intee Coal	30
— " —	92 Caleb Kirk	30
— " —	74 Ch. Mc Intee	30
— " —	30 Tho. Stan Magnus	30
— " —	108 Jos. H. Miller	30
— " —	87 David Lutter	30
— " —	32 Ch. David	30
— " —	126 David Lutter	30
— " —	117 Comd. J. Dubois	30
— " —	112 Alex. Snyder	30
— " —	22 Joseph H. H. H. H. H.	30
— " —	50 John D. Campbell	30
— " —	John A. D. Van Wagner	30
— " —	Post John A. D. Van Wagner	30
— " —	No 53 Tho. Van Wagner	30
— " —	98 Rich. Jackson	30
— " —	67 Rich. Jackson	30
— " —	73 Fred. Moul	30
— " —	50 John D. Campbell without C. Lading	
— " —	112 Alex. Snyder	
— " —	53 Tho. Van Wagner	
— " —	John A. D. Van Wagner	
— " —	Post John A. D. Van Wagner	
— " —	No 98 Rich. Jackson	
— " —	67 Rich. Jackson	
— " —	Specimen. Endicott Mansfield	
— " —	No 73 Fred. Moul	
— " —	100 Solomon Gray	
— " —	17 H. W. Wood	
— " —	78 James H. Bush	81. 78
— " —	99 Jos. H. Miller	
— " —	56 J. Warner	
— " —	114 James H. H. H.	
— " —	Robert J. B. Scott	

Account of Arrival & Departure of Boats 1832

1832	June 18	Boat N. 113.	B. J. House without C. Lading	
	"	"	33 John Whitaker	
	"	"	120 Mont. J. Salpauk	
	"	"	23 Amasa Ingraham	
	"	"	125 Robert J. Hoar	
	"	"	11 James Purdy	
	"	"	45 Moss Cole	
	"	"	47 J. M. Wood	
	"	"	79 H. M. Wood	
19	"	"	118 G. J. Jackson Coal	30
	"	"	55 D. J. Schuyler	30
	"	"	102 David Garrison	30
	"	"	62 David Garrison	30
	"	"	125 Robert J. Hoar	30
	"	"	120 M. Salpauk ^{5 M. House to 1st}	30
	"	"	79 H. M. Wood ^{5 M. House to 1st}	30
	"	"	33 John Whitaker	30
	"	"	70 H. M. Wood	30
	"	"	23 Amasa Ingraham	30
	"	"	11 James Purdy	30
	"	"	69 David Moolay 166 fresh ^{166 fresh}	30
	"	"	113 B. J. House Coal	30
	"	"	82 John J. Miller	30
	"	"	26 John J. Clow	30
	"	"	47 J. New Comb	30
	"	"	2 David H. Bush	30
	"	"	45 Moss Cole	30
"	"	"	60 John Longyear without C. Lading	
"	"	"	14 Ch. B. Van Buren	
	"	"	2 Peter H. Bush	
	"	"	77 John Rice	30
	"	"	101 John Boyce	30
	"	"	58 Ch. M. Pettie	
	"	"	54 J. J. Clow	
	"	"	41 Woodhull Dubois	
	"	"	131 A. M. Eddcott Mrs. D. J. D.	
	"	"	69 David Moolay	

Account of Arrival & Departures of Boats 1832

1832	June 19	Boat No 86. J. E. Keat without C. Lading	
		" " " " " " " "	
		" 97. Abm Rice " "	30
		" 101. Abm Boyce Coal	30
		" 77. Abm Rice " "	30
		" 97. Abm Rice " "	30
		" 40. 2 P. Schuyler without C. Lading	
		" 1. J. B. Bidwell " "	
		" 109. Joseph Brown " "	30
		" 84. John A. Best " "	30
		" David Scott C. L. Murray & Co. No. 34. New York for C. L. Murray	30
20		" 1060. John Langgus Coal	30
		" " " " " " " "	30
		" 86. E. J. Keat " "	30
		" 14. C. B. Van Wagner " "	30
		" 54. J. C. Cloos No. 11. P. Schuyler to Poughkeepsie	30
		" 44. Brodhead Dubois " "	30
		" 58. Ch. M. Butler " "	30
		" 109. Joseph Brown " "	30
		" 40. 2 P. Schuyler " "	30
		" Eliza. Edward Murray No. 10. Lumber	30
		" Capt. Hamilton David Lawrence " "	30
		" Miles Wright J. B. Bidwell 9 " "	44.14
		" No. 54. John A. Best Coal	30
		" Remondt J. W. Jackson " "	30
		" No. 38. Capt. A. Meale " "	30
		" 61. Jacob J. Davis " "	30
		" 27. James D. Smith " "	30
		" 37. James D. Smith " "	30
		" Randall J. W. Jackson without C. Lading	30
		" No. 37. J. D. Smith " "	30
		" 27. James D. Smith " "	30
		" 61. Jacob J. Davis " "	30
		" 38. Capt. A. Meale " "	30
		" 52. Lewis Miller " "	30
		" Franklin J. D. Schoonmaker " "	30
		" Columbus J. D. Schoonmaker " "	30

Account of Arrival & Departure of Nov. 1832

1832	June 20	Boat No. 7	Levi D. Slater without Coal	
		"	Ma st - Leta Hoar	
		"	66. Farm Store	
		"	16. Farm Store	
		"	100. Phillip Van Kersen	
21		"	52. Leger Miller Coal	30
		"	31. James Van	30
		"	1. Jacob B. Bidwell	30
		"	Franklin J. D. Spoonmaking	30
		"	Columbus J. D. Spoonmaking	30
		"	No. 7. Levi D. Slater	30
		Scots Superior Philander Keefe 25. M. P. Bond 4.57		
		to M st 25. M. D. 1.00		
		M st 25. 4.00		
		10.875		
		Boat No. 6	Agnes Store Coal	30
		"	Ma st - Leta Hoar	30
		"	100. Phillip Van Kersen	30
		"	16. Farm Store	30
		"	29. Mrs. Crozier	30
		"	18. Mrs. Crozier	30
		"	96. Alex. Myden	30
		"	106. Alex. Myden	30
		"	29. Mrs. Crozier without Coal	
		"	18. Mrs. Crozier	
		"	96. Alex. Myden	
		"	106. Alex. Myden	
		"	58. John Blawie	30
		"	42. Mons. Kortright	
		"	49. A. L. Leflore	
		"	51. John P. Davis	
		"	68. Josiah Warner	30
		"	39. J. H. Depero	
		"	48. James W. Cooper	
22		"	58. John Blawie Coal	30
		"	42. Mons. Kortright	30
		"	49. A. L. Leflore	30
		"	68. Josiah Warner	30
		"	39. J. H. Depero	30

Account of Arrival & Departure of Boats 1832

June 22	Boat N. 51	John P. Davis	Coal	30
"	" 42	James M. Ladd	"	30
"	" 28	Wm. Ditz	"	30
"	"	Commerce Eddcott	Manuf. 3 Mts. Boat 12 Empty 1832	30
"	" 8. 11	Brig. E. C. E.	Coal	30
"	" 57	Levi D. Hately	"	30
"	" 134	Chas. M. Hately	"	30
"	" 71	Frederick R. Marshall	"	30
"	" 131	Eddcott & Manuf. 1832	Manuf. 1832	30
"	" 28	W. Ditz	without Co. Lading	30
"	"	Commerce Eddcott	Manuf. 1832	30
"	" 111	Brig. E. C. E.	"	30
"	" 76	E. B. Van Wagener	"	30
"	" 83	F. R. Marshall	"	30
"	" 80	Ditto	"	30
"	" 71	Ditto	"	30
"	" 65	John Carter	"	30
"	" 21	David Munder	"	30
"	" 57	Levi D. Hately	"	30
"	" 134	Chas. M. Hately	"	30
"	" 89	David Munder	without Co. Lading	30
"	" 9	Brig. E. C. E.	"	30
"	" 25	Abijah Loring	"	30
"	" 94	David Munder	without Co. Lading	30
"	" 81	Seth Shepley	without Co. Lading	30
"	"	Gen. Washington	Dec. 11, 1832	30
23	" 21	David Munder	Coal	30
"	" 65	John Carter	"	30
"	" 83	Frederick R. Marshall	"	30
"	" 80	Frederick R. Marshall	"	30
"	" 76	E. B. Van Wagener	"	30
"	"	Dated Oct. 1832	1832	30
"	" 89	David Munder	Coal	30
"	" 9	Brig. E. C. E.	"	30
"	" 25	Abijah Loring	"	30
"	" 94	David Munder	"	30

Account of Arrival & Departure of Passengers

1852

June 25	Boat	Zephyrus	John Abernethy	without C. Lading	32
"	"	Nº 24	Jacob S. Agnew	"	33
"	"	95	Mr. C. Giddington	"	"
"	"	34	Simon Grant	"	"
"	"	5	Corn. L. Addison	"	"
"	"	35	Vincent Huganir	"	"
"	"	Thompson's	George Rodman	Nº 77. Mr. 20.8.00	"
"	"	Luther Radick	P. J. Haver	" 189. " 17.12.00	"
"	"	Superior	Joseph B. Cogswell	Nº 201. " 15.43.14	"
"	"	John Marts	E. E. Deputy	without C. Lading	"
26	"	Nº 5	Corn. L. Addison	Coal	30
"	"	34	Simon Grant	"	30
"	"	Thompson's	George Rodman	Nº 77. Mr. 20.8.00	"
"	"	Olive Branch	John E. Harbrough	"	30
"	"	Nº 24	Charles Smith	"	30
"	"	123	David Evans	"	30
"	"	119	John Elroy	"	30
"	"	117	James I. McGee	"	30
"	"	128	James I. McGee	"	30
"	"	Orphan Boy	Ch. L. M. Huter	"	30
"	"	122	James I. McGee	"	30
"	"	Whistle	John Carter	"	30
"	"	Napoleon	John Carter	"	30
"	"	130	Eudicot Mearns	"	30
"	"	Alster	Eudicot Mearns	"	30
"	"	Luther Radick	John A. Haver	Nº 5. Grp. Lumber	20.45
"	"	Nº 24	Charles Smith	without C. Lading	"
"	"	Olive Branch	John E. Harbrough	"	"
"	"	Nº 19	John Elroy	"	"
"	"	123	David Evans	"	"
"	"	127	James I. McGee	"	"
"	"	128	James I. McGee	"	"
"	"	Orphan Boy	Ch. L. M. Huter	"	"
"	"	Nº 122	James I. McGee	"	"
"	"	130	Eudicot Mearns	"	"
"	"	Alster	Dict.	"	"
26	"	Nº 92	Call. Rich	"	"

Account of Arrival & Departure of Pass 1832

New	26	Boat No 44.	J. P. Kelly Without Co Lading
"	"	30 - J. P. Kelly	" "
"	"	20 - Wm B. Blackfoot	" "
"	"	59 - J. P. Kelly	" "
"	"	115 - J. P. Kelly	" "
27	"	92 - Caleb Nick	Coca C
"	"	44 - J. P. Kelly	" "
"	"	30 - Tho Van Wageningen	" "
"	"	20 - Wm B. Blackfoot	" "
"	"	59 - Dan Landenfont	" "
"	"	Superior Joseph N. Conner A. V. Lamb	\$2.15
"	"	A. H. Sprockings	- Coca -
"	"	98 - Rich Jackson	" "
"	"	67 - Rich Jackson	" "
"	"	74 - Ch McHate	" "
"	"	116 - Jpr Whitney	" "
"	"	93 - Jpr Whitney	" "
"	"	67 - Rich Jackson	Mittent & Ladins
"	"	98 - Rich Jackson	" "
"	"	116 - Jpr Whitney	" "
"	"	74 - Ch McHate	" "
"	"	Vrain A. I D Van Wagening	" "
"	"	President A. I D Van Wagening	" "
28	"	93 - Jpr Whitney	" "
"	"	Ga Washington D McFarland Jr M Perry	7.12 1/2
	"	Bought to North side	4.50
	"	Nice as	4.50
	"	Wm flour toe horses	8.07 1/2
"	"	Pres A. I D Van Wagening	- Coca -
"	"	Vrain A. I D Van Wagening	" "
"	"	Seco Superior P Rexer & 25 McRae Bonds	4.37 1/2
"	"	North 25 McRae	1.50
"	"	McRae agt	10.37 1/2
"	"	Boat No 64 Rich Blawhan	Coca C
"	"	49 Adam Skerson	" "
"	"	10 Jpr Brown	" "
"	"	108 Jpr Thellier	" "
"	"	85 John Clearwater	" "
"	"	36 John Clearwater	" "
"	"	64 St Blawhan Mittent & Ladins	" "
"	"	35 John Clearwater	" "

Account of Arrival & Departure of Boats 1832

June 28,	Boat N ^o 36.	John Clearwater	without C ^o (sailing)	22
" "	" 6.	John Clearwater	" "	22
" "	" 108.	Jose H. Miller	" "	22
" "	" 126	David Catlin	" "	22
" "	" 99.	Jose H. Miller	" "	22
" "	" 63.	Thos. Hookes	" "	22
" "	" 3.	John P. Davis	" "	22
" "	" 114.	James J. Regua	" "	22
" "	" 8.	Joshua Hungen	" "	22
" "	"	Manure Warts - C. Elmore	" "	22
" "	" 105	George Donance	" "	22
29	" 126.	David Catlin	Coat	30
" "	" 105	George Donance	" "	30
" "	" 63.	Thos. Hookes	" "	30
" "	" 99.	Jose H. Miller	" "	30
" "	" 114.	James J. Regua	" "	30
" "	" 3.	John P. Davis	" "	30
" "	"	Manure Warts - C. Elmore	" "	30
" "	" 8.	Joshua Hungen	" "	30
" "	" 56.	Joseph Haagsbuck	" "	30
" "	"	Philip Hone - C. Elmore	" "	30
" "	" 132.	J. Davis	" "	30
" "	"	Speedwell - Endicott & Mansfield	" "	30
" "	" N ^o 117.	Corn ^l J. Dubois	without C ^o (sailing)	30
" "	" 17.	Henry M. Wood	" "	30
" "	" 79.	Henry M. Wood	" "	30
" "	" 78.	James J. Park	" "	30
" "	" 119.	John J. Park	" "	30
" "	" 32.	M. Mathias	" "	30
" "	"	Speedwell - Endicott & Mansfield	" "	30
" "	"	Philip Hone - C. Elmore	without C ^o (sailing)	30
" "	" N ^o 132.	J. Davis	" "	30
" "	" 117.	Corn ^l J. Dubois	" "	30
" "	" 53.	Thos. Van Wageningen	" "	30
" "	" 79.	Henry M. Wood	" "	30
" "	" 17.	John J. Park	" "	30

Account of Arrival & Departure of Boats 1832

1832

June 29	Boat N ^o 78	James the Black without C ^o ading	
"	" 119	Peter the Black	"
"	" 32	M. Matthias	"
"	" 50	J. Campbell	"
30	"	S ^o Tho ^s Van Wagner	Coul 30
"	" 50	J. Campbell	" 30
"	" 47	Tho ^s Newcomb 20 th Easton for Campy 20 th	30
"	" 30	Boat N ^o 166 Whitey 3 rd Boat N ^o 167 Whitey 3 rd	30
"	"	Boat N ^o 6 John Cleawating	Coul 30
"	" 73	Phillip Mark	" 30
"	"	Genl Washington D. McClinton from Northbrook	60
"	" N ^o 47	Tho ^s Newcomb without C ^o ading	"
"	" 73	Phillip Mark	2 nd 7 th Michl 7 th 9 th 0 th
"	"	Lautat from his C. D. Harris	Without C ^o ading
"	" 22	Joseph Spangenberg	2 nd 7 th Michl 7 th 9 th 0 th
"	"	Delas Wright B. R. House N ^o 270. Mse 13.3.2.0	
"	" N ^o 125	John Carter	Without C ^o ading
"	" 26	J. J. Clow	"
"	" 100	Albin Bryce	"
"	" 77	Albin Price	"
"	"	Clinton John C. Dubois N ^o 260 Mse 20.4.0.0	
"	" 118	L. J. Constant	Without C ^o ading
"	" 133	L. J. Constant	"
"	" 77	Albin Price	"

Weekly Newspaper Columns of News and Notes about the Gravity Railroad, September 15, 1882-November 30, 1883

A newspaper column of news and notes exclusively about the Gravity Railroad was published regularly, but not weekly, in the newspapers published in Carbondale in the period September 15, 1882—October 28, 1892.

For the period September 15, 1882—May 7, 1886, these columns were titled *Gravity Notes*, and they were written by three different correspondents: “Mountaineer,” “Wide Awake,” and “Wideawake.”

For the period March 3, 1887—October 28, 1892, these columns of news and notes about the Gravity Railroad had nine different titles: *Gravity Happenings*, *Along the Gravity*, *From the Gravity Planes*, *Notes from the Gravity*, *Notes from the Gravity Road*, *From the Gravity Road*, *Along the Gravity Road*, *Up on the Moosic*, *Along the Planes*. An author’s name is not given on any of these columns.

These columns of news and notes about the Gravity Railroad are all very interesting historical documents. Frequently they contain facts about the Gravity Railroad that are recorded nowhere else. Frequently, as well, they contain comments and observations of a gossipy/in-crowd nature which were understood/fully comprehended only by Gravity employees at the time. These columns are always interesting, to be sure, and we have learned a lot in reading them all.

All of these newspaper columns of news and notes exclusively about the Gravity Railroad will be published in Volumes VII, VIII, IX, and X of this series on the Delaware and Hudson Canal Company's Gravity Railroad.

In Volume VII (the present volume) we will publish the columns for the period September 15, 1882—November 30, 1883.

In Volume VIII, we will publish the columns for the period January 4, 1884—December 30, 1884.

In Volume IX, we will publish the columns for the period January 2, 1885—May 29, 1885.

In Volume X, we will publish the columns for the period June 2, 1885—October 28, 1892.

Here, then, are the newspaper columns of news and notes about the Gravity Railroad (all of these columns are titled *Gravity Notes*) that were published in the *Carbondale Leader* and the *Carbondale Advance* in the period September 15, 1882—November 30, 1883.

The Grand Army of the Republic post in Carbondale is called the "William H. Davies Post." William H. Davies worked on the light track, now at No. 6.

GRAVITY NOTES.

William H. Davies, formerly employed on the light track, has accepted a position at No. 6 on the loaded track.

Mrs. Vail, wife of Henry Vail of No. 7, returned home with her two children on Wednesday from a visit to friends in Scranton and Pittston. Henry won't have to walk to Carbondale and back for his supper any more now.

The new engines that have been put in at No. 27 under the management of G. W. Sampson, the assistant master mechanic of the company, are working like a charm.

Henry Vail:
worked at No. 7

New engines at No. 27, put in under management of G. W. Sampson, working like a charm

Rufus Randall, the smallest man outside a circus, rode the Gravity Railroad to Honesdale last week.

The smallest man outside of a circus went over the gravity on the way to Honesdale, one day last week. He talked freely with the gravity boys. Said his name was Rufus Randall, that he lived in Masonville, Del. Co., N. Y., was 27 years old, weighed only 76 pounds and was only three feet ten inches high.

". . . at or above the switchback, No. 2. . ." This was the switchback off Level No. 2, near the foot of Plane No. 3. Here the loaded cars could be switched off the loaded track and weighed. See p. 517 of the volume in this series on the 1868 configuration.

The old man that was discovered plucking other fruit than that which he pretended to be after at or above the switchback, No. 2, the other day, had better be more cautious as "stone-walls have ears" and women have eyes.

MOUNTAINEER.

Given the remarkable quantity of new facts about the Gravity Railroad that are contained in just this one column from September 15, 1882, it should be abundantly clear to all that these columns are of great value in establishing a comprehensive history of the Gravity Railroad.

"... a firkin of butter."

The word *firkin* is derived from the Middle Dutch word *vierdekijn*, meaning *fourth*. A firkin is a small barrel that is one-fourth the size of a regular barrel. As opposed to a standard U. S. fluid barrel, which contains 31.5 U. S. liquid gallons, the volume of a full firkin is 40.91 liters or 10.79 gallons

Uncle Tom's Cabin company (with mules and trained dogs) rode the Gravity Railroad from Honesdale to Carbondale this week.

GRAVITY NOTES.

Irving Weed, wheelman at No. 9, had his cellar broken into one night last week, and a firkin of butter, some canned fruit and other winter supplies stolen.

Richard Udy has added a bay window to his residence which has enhanced the value of his property to some extent.

When a young man's buggy isn't large enough to hold three, why should another expect to ride when the young man's sweetheart has the precedence.

Mr. Aleck Travers has accepted a situation at the foot of No. 1 under S. A. Dilts.

Uncle Tom's Cabin company accompanied by their mules and trained dogs passed over the gravity road from Honesdale one day this week.

MOUNTAINEER.

Irving Weed was wheelman at No. 9. What duties did a wheelman perform?

Aleck Travers now works at the foot of No. 1, under S. A. Dilts.

The white horse *Tom*, who works at the foot of Plane No. 1 likes tobacco.

GRAVITY NOTES.
The white horse "Tom" who does duty at the foot of No. 1 plane is an inveterate tobacco chewer.

Wonder what a certain track hand does with so many stockings of a particular kind about every pay-day night.

John C. Davies experienced a great disappointment in not having duck for dinner last Sunday. The miserable old gun must have been the cause of it, for John's marksmanship is still O. K.

Ben. Dimock has left the gravity and accepted a position on the valley road. Ben's genial countenance is missed along the line.

Ben. Dimock has left the Gravity road and now works for the D&H steam line from Carbondale to Scranton, the valley road.

Nicholas Flood, Jr. works at Plane No. 4.

The autumn scenery along the gravity road was never more gorgeous than now. The tourist is well repaid for his trip by the elegant view he gets.

Mr. Nicholas Flood, jr., of No. 4. has just presented his sister with a fine new organ, and it was initiated on Saturday night with appropriate ceremonies, all the musicians of the neighborhood being invited in to participate in a grand musical celebration. There was some expert dancing done, especially by the older members of the gathering. A good time generally was had.

George Chapman, the night watchman at No. 7, was attacked by rats, probably wharf-rats, which may have come through the water pipe which furnishes water to the engines down the line.

Mr. George Chapman, night-watchman at No. 7, was attacked by a large number of rats last Saturday night, one of them biting him on the nose while the others were swarming around him biting his legs and feet. He says they were very large, somewhat resembling the vicious wharf-rat, and it is supposed they came through the water pipe which furnishes water to the engines down the line.

Mr. George Baker borrowed a gun last Tuesday to try his luck at shooting wild ducks. He made all possible haste to No. 4 pond, and was not long there when he descried a half dozen of the beauties he was in search of floating majestically within a short distance from where he stood. He drew a bead on them and pulled the trigger. A loud report followed, and the ducks flew—so did the barrel of the gun; leaving the stock in George's hands, shattered to pieces. A few seconds after the report the barrel struck the ground within a few inches of his feet., it having gone upwards instead of in the direction of the ducks. Mr. Baker considers it a providential escape.

George Baker went duck hunting on No. 4 Pond.

MOUNTAINEER.

GRAVITY NOTES.

'Mountaineer' has returned. He was up "Salt river" procuring rates for the ship load of independents who were contemplating a trip.

→ Leavitt's minstrel troupe passed over the gravity Wednesday morning.

The engineers along the line are wondering what they will do if it doesn't rain soon. Nearly all the springs are dried up.

Mrs. Adam Hunter is slowly recovering from a very severe attack of paralysis.

The headmen at No. 5 were not shoveling snow Tuesday morning. Wonder what it was?

→ Mr. P. A. Powderly has sufficiently recovered to enable him to make his daily examinations of cars at the switchback once more.

The No. 4 "Claude Duval," who pursued his nightly avocation of bringing travelers to a halt and inquiring their names, has left. No information wanted as to his whereabouts.

Seigel Robbins, headman at No. 1 plane, had his left foot badly smashed on Thursday afternoon. He was boarding the coal cars to put on the brake when his foot slipped between the bumpers just as the cars came together. He may be laid off some weeks.

MOUNTAINEER.

Leavitt's minstrel troupe passed over the Gravity Railroad on Wednesday morning.

The daily examination of cars by P. A. Powderly at the switchback at the intersection of Level 20 (the light track from Farview to Archbald) and the Blakely Level / Cripple Car track: see the volume in this series on the 1868 configuration, pp. 515-516.

Nearly all of the springs that supply water to the engine houses on the Gravity Railroad are dried up.

Seigel Robbins, headman at No. 1, had his foot badly smashed on Thursday.

John C. Davies,
engineer at No.
4: see story
below.

Accidents:

at No. 1

at No. 27

and

at No. 5

Engine house at
No. 4 (John C.
Davies, engineer)
burnt last Sunday
morning. New
engine house built
and ready to hoist
coal at 7 A.M. on
the following day!

John C. Davies called his engine at
No. 4 *Flora Temple*. It was one of the
fastest engines on the line; built in
1880, pulled first trip on the morning
of February 25, 1881.

GRAVITY NOTES.

This has been a week of troubles along the gravity.

J. C. Davies' health has improved wonderfully owing to his taking so much out-door exercise the past week.

John Milligan jr. employed at the head of No. 1 plane had the fleshy part of his arm badly crushed on Tuesday while coupling cars.

A drum-shaft broke on No. 27 engine at Plane A, near Archbald on Thursday morning and caused a delay of about seven hours in the running of coal.

The passenger train left on time Monday morning, and Conductor Rosser was inquiring for the man that started the report that No. 4 engine house had been burned down the day before.

The breaking of a crank pin on No. 5 engine on Monday created considerable delay. The road running so late that night, was due to this and not to the burning of No. 4 engine.

It was a worn out looking set of D. & H. bosses that walked down the mountain from No. 4 on Monday forenoon. But a little soap and water no doubt brightened up their countenances considerably.

On Sunday morning last at about a quarter before seven, stationary engine No. 4 on the gravity road, of which Mr. John C. Davies is engineer, was discovered to be on fire. The building was in such a dry condition that it took but very few minutes for the flames to spread beyond control, and in twenty minutes from the time the fire broke out the building was burned to the ground.

The trestle-work under the track along side of the building was burned so badly as to require new timber, and it looked as though there had arisen in a few moments an obstruction that would cause a delay in the shipment of coal for at least several days. But the superintendent was on the scene in a very short time, and before the smoke had cleared away sufficient to allow the men to see, and while the timbers were still glowing with the heat, began giving his orders to a large gang of men in such a way as to show that he did not intend to have any such delay. The telegraph line was cut and a temporary telegraph office established at No. 4 head with H. C. Butler in charge, and messages began to fly back and forth in regard to timbers, ropes, parts of machinery, &c., that were required, and all during that day and the following night a large force of men were busily employed reconstructing everything that was necessary of the frame-work of the building, drum and track, and machinists were fitting parts of the machinery that had been destroyed by the fire or bent out of shape by falling timbers, while the shops and saw-mill were going full blast manufacturing what was required. By seven o'clock on Monday morning, much to the surprise of everybody, everything was ready and John C. Davies, with his smoke-begrimed face began to hoist coal up No. 4 plane as usual. How the building caught fire is a mystery. The watchman, George Colburn, reports everything all right when he left about an hour before the fire broke out. No. 4 engine house and engine were considered among the best along the gravity, and no engineer could possibly take more pride in his surroundings than did Mr. Davies. He called his engine "*Flora Temple*," and it deserved the name, for it certainly did surpass everything on the line in the way of speed. She was comparatively new, being built in 1880 and pulled her first trip on the morning of Feb. 25, 1881.

MOUNTAINEER.

Temporary telegraph
office established at
No. 4, with H. C.
Butler in charge.

The watchman at
No. 4 was George
Colburn.

<p>Irving Weed now dispatcher of trains at No. 9</p>	<p style="text-align: center;">GRAVITY NOTES.</p> <p>Irving Weed has accepted the position of dispatcher of trains at No. 9.</p> <p>It requires eight engines to pull the passenger trains on the gravity road between Carbondale and Honesdale, while one does the work very easy between this city and Scranton.</p> <p>Cigars of the very best quality were liberally distributed at the head of plane 6, a few days ago. Mr. David Wolcott paid the bill on account of his daughter who has just arrived.</p> <p>Mr. Frank Hollenbeck lost one of his best horses yesterday morning. The horse fell breaking his leg which rendered him useless. He was valued by his owner at \$200.</p> <p>Mr. J. C. Davies' daughter Hettie narrowly escaped a shocking death Wednesday morning. She was riding on a lumber sleigh, lost her balance and fell under the hind bob which passed over her inflicting slight injuries.</p> <p>A negro dentist passed over the gravity road last Saturday and gave the following as a cause for toothache: "When the nocturnal hour is so far procrastinated by a superabundant application of the obganious, secedious, mustadific, component parts of the crustoic solid an undue expansion of the stomach ensues, which in course of its contispating influence stigmatizes the nervo-optic system and promulgates the toothache."</p> <p>The largest shipment of coal over the gravity road in any one month, was made in November, over 400 trips a day on an average, notwithstanding the burning down of No. 4 engine house.</p> <p style="text-align: center;">MOUNTAINEER.</p>	<p>The D&H Steam Line from Carbondale to Scranton (the Valley Road) will be the subject of Volume X in this series.</p>
<p>Mr. and Mrs. David Wolcott have a new daughter. David Wolcott works at the head of Plane No. 6.</p>		<p>John C. Davies is the engineer at the head of Plane No. 4.</p>
<p>Words of wisdom from a passenger on the Gravity Railroad.</p>		<p>Record breaking shipment of coal over the Gravity line in one month: over 400 trips per day, on an average, during November 1882.</p>

GRAVITY NOTES.

Mr. Wallace Case, who was injured by falling off a car load of lumber a few weeks ago is again able to perform his arduous duties.

P. J. Foster is the engineer at Plane No. 3.

P. J. Foster, engineer at No. 3, is suffering from a very lengthy attack of measles.

Mr. Wm. P. E. Morss, supt. at No. 3 breaker has the most efficient and economical slate picker in the valley.

William P. E. Morss is the superintendent at No. 3 breaker.

The Scranton *Sunday News* is publishing biographical sketches of the most prominent railroad boys along the line of the D. & H. The writer seems to understand their individual peculiarities.

Frederick Buckland, Waymart section track department, killed by cars descending Plane No. 9—which is why these *Gravity Notes* are framed in black.

On Tuesday evening of this week Frederick Buckland, employed on the repairs of track on the Waymart section of the gravity, was run over by a trip of cars that were descending No. 9 plane. He was shovelling snow from the loaded track, and a trip of light cars passing at that moment on a track running parallel with the one he was on, prevented his hearing the approaching cars and he was knocked down. The whole trip passed over him, crushing his legs and arms badly. He was immediately taken to his home at Waymart and died within an hour. He was a general favorite with the railroad boys and his loss will be mourned by his companions.

It is worth one's while to take a trip over the gravity to see the beautiful effects of the ice storm which prevailed along the mountain last week. The trees and shrubbery are covered with ice, which as the sun shines upon them, makes them appear as though covered with magnificent and resplendent jewels.

Take a ride on the Gravity Railroad to enjoy the beautiful effects of the recent ice storm.

MOUNTAINEER

GRAVITY NOTES.

Miss Nellie Love, of Providence, is visiting Miss Fannie Hollenback, at No. 6.

Mr. Frank Wolcott has purchased the residence formerly owned by Patrick Malone, at No. 4. Consideration \$450.

Mr. Minor Stark, headman at No. 5, is reported as being very low. His sickness is occasioned by typhoid pneumonia.

John C. Davies experienced last Saturday forenoon another severe attack of neuralgia of the stomach. He said he felt as well as he ever did in his life five minutes before he was attacked while running his engine, and in less than ten minutes afterwards appeared to be a first class subject for an undertaker.

Dr. Myers, late of Bavaria, Germany, has effected some wonderful cures with his "Four Corner" Liniment around No. 4. He is now alleviating the ills of the Canaanites.

The thermometer indicated four degrees below zero at No. 4 last Tuesday morning.

Any person whose scruples for breaking the Sabbath are not very strong can satisfy his desires by repairing to No. 4 hill next Sunday afternoon, where "coasting" sleighs will be furnished him.

The combined freight and passenger train, recently put on the Gravity, has been abandoned, owing to the difficulty of getting the freight through, on time, and other causes.

Charlie and Harry failed to watch the boiling pot, and its contents were burned.

Mrs. John Bergan is slowly recovering from a stroke of paralysis.

Minor Stark, headman at No. 5 has typhoid pneumonia.

John C. Davies, engineer at No. 4, had a severe attack of neuralgia of the stomach last Saturday.

Dr. Myers, from Bavaria, is now practicing in Canaan Township.

"Coasting" sleighs will be available on No. 4 hill next Sunday.

Four below zero at No. 4 last Tuesday morning

The combined freight and passenger train that was recently put on the Gravity line has been abandoned for several reasons.

Broken ropes on Planes No. 23 and on No. 1 made it necessary for the Gravity planes employees to work until 10 o'clock at night on Monday.

The *Carbondale Leader* is the most popular newspaper along the line of the Gravity Railroad.

Miner Stark, headman at Plane No. 5, has recovered from typhoid pneumonia.

Sig Robbins no longer works for the Gravity. He now works on the D&H locomotive line to Scranton, braking on train Coal 9.

Alex. McMillan is the engineer at Plane No. 19.

GRAVITY NOTES.

Mountaineer has "gin out."

Mrs. John Bergen is slowly recovering from her severe illness.

The LEADER takes the lead of all other papers along the gravity.

Charley and Harry are on the night shift down at the tannery.

The funeral of Thomas Mangan was largely attended on Tuesday.

Miner Stark is entirely recovered from his late illness and is again at his post at No. 5.

Charles Stanton and the little red man are getting out props during the three idle days.

Alonzo Hedglin says it is something new to get up nights and take the baby for a midnight walk.

Sig Robbins has been changed from the Gravity road to the Locomotive road and is now braking on coal 9.

We are going to give the boys along the gravity something to read each week in the LEADER,—subscribe for it.

The breaking of a rope at No. 23 on Monday morning and another at No 1 in the evening laid the boys out on the Gravity until 10 o'clock at night.

Mr. Hiram Hudson returned from Kansas City, on Wednesday, where he had been to see Mr. Frank McMillan who is dangerously ill. Frank is a son of Alex. McMillan, engineer at No. 19.

It is seldom if ever that our rone rigger makes a mistake, but he got bothered on Wednesday afternoon, changed ends with a rew rope on No. 4 instead of the old one and nearly worn out. It is a pretty good joke and the boys will laugh just a little.

WIDE AWAKE.

GRAVITY NOTES.

Last Tuesday and Wednesday were regular old Wigginitish days on the mountain.

Alonzo Foster has been quite sick during this week.

Miner Stark, of No. 5, has been to Montrose this week, where his father is dangerously ill.

Robert Hoadley, who has been employed by the D. & H. for a number of years, died at his home in Prompton Tuesday evening.

Alexander McMillan was seriously injured Monday evening on his return from Carbondale by the upsetting of his buggy.

F. M. Osborne has this week been presented with a little daughter.

C. L. Stanton & Co., have this week made what they call a "go-devil" for hauling ties, it has been on exhibition at the light track shanty for three days.

Levi Bennett, watchman at No. 2, has been confined to the house for some time by the bursting of a blood vessel in his leg.

Frank Wolcott, of No. 7, drives one of the finest teams in this or any other county and he knows how to take care of them, too.

Mrs. John Bergen is very low and but little hopes are entertained for her recovery.

Conductor Utley Thorp has quit rail-roading for the present and will work for the mine department.

There is not to be found a more sober and industrious set of men in this country than upon the D. & H. gravity road.

B. F. Case, of Waymart, is soon to start for his new home in Dakota. Success to you Ben.

Milton Shaffer will stand more hard thumps than any other man on the gravity.

The D. & H. are making some improvements at No. 2 by digging out and laying a solid wall near the oil house.

Frank McMillan, a notice of whose sickness appeared in the gravity notes two weeks ago, died at Kansas city Sunday last. The remains were sent to his home near Waymart yesterday. Frank was about 40 years of age and was highly respected by all who knew him. He was not a married man.

WIDE AWAKE.

Miner Stark, headman at No. 5, visited his ill father in Montrose.

Robert Hoadley, a D&H employee for a number of years, has died at his home in Prompton.

C. L. Stanton & Co. have made this week a "go-devil" for hauling ties.

Levi Bennett is the watchman at No. 2.

Frank Wolcott of No. 7 is a skilled teamster with a fine team.

"There is not to be found a more sober and industrious set of men in this country than upon the D. & H. gravity road."

D. & H. now making improvements at No. 2 by digging out and laying a solid wall near the oil house.

GRAVITY NOTES.

News scarce.

Full time after this week, and the boys are all happy.

Eli Robbins, of No 1, is twisting brakes on the valley road.

Charley Jones, of No 6, resigned his position Wednesday last.

George Correll, conductor on the light track, has this week accepted a scoop on engine 25. Success to him.

Allen Williams, of No 8, has accepted a position on Charlie Monk's train.

Morris Miller is runing Utley Thorp's train on the lower end.

The boys think G. W. Baker ought to buy the cigars. Cause, promotion.

Barney denies being a member of the wheelbarrow club.

There seems to be a great interest in the revival meetings now being held in Carbondale, from the fact that men in Waymart are being blessed by going over to hear Rev. Mr. Earle preach. May the good work go on until many on the gravity may find that peace that comes only by serving God. **WIDEAWAKE.**

Eli Robbins, of No. 1, now works as a brakeman on the Valley Road.

Allen Williams of No. 8 now works on Charlie Monk's train.

The Gravity line will work full time after this week.

Charley Jones of No. 6 resigned last Wednesday.

George Correll, formerly a conductor on the light track, is now a fireman on engine 25.

The men from Waymart are showing a strong interest in the revival meetings held in Carbondale, with the Rev. Mr. Earle preaching

GRAVITY NOTES.

Full time makes everything lively along the gravity.

John C. Davies, engineer at No. 4, has this week been suffering with neuralgia of the stomach.

Mrs. John Keegan, of No. 9, has been very ill during this week.

R. E. Weed, train dispatcher at No. 20, returned on Monday from a trip to Philadelphia.

W. F. Taylor is one of the gravity book agents.

Fred Shaffer is employed at No. 8 foot as assistant to Geo. Shreehan.

Jasper Vail, of No. 7, moved into Frank Wolcott's house near No. 4 chapel last Saturday.

Peter States, watchman at No. 8, has so far recovered from his injuries as to be able to fill his position again.

B. F. Case started for his new home in Dakota on Wednesday.

Orin Griswold, formerly a gravity man, is now conducting a freight train on the Pennsylvania R. R.

A special train was run from Honesdale, on Tuesday, to carry people over to the funeral of the late Mrs. Birdsall, at Carbondale.

Fred. Kepler was out hunting "goons" on Monday and he reports the snow three feet deep in the woods.

Miner Stark's oldest daughter has been seriously ill at Montrose for the past week.

Mrs. G. W. Baker has been suffering this week with a severe attack of quinsy.

C. W. Miller, wheel-runner at No. 9, is putting up a fine dwelling house.

Alexander McMillan is still confined to the house. Sammy Bryant is running his engine during his absence.

Frank Faulkner can't be beat as a newsboy, he will bring you the LEADER every Saturday morning if you wish it.

George Correll has purchased Sylvester Bailey's new house on No. 1 hill.

Alonzo Hedglin, of No. 4, is soon to take up his abode in Dunmore.

Racket Brook breaker sends out the best coal that goes over the gravity. Wm. Morss knows how to keep it best.

Eddie Keen, who left the gravity about a year ago is now a successful farmer in Southern Dakota.

Emery Rolls, of No. 12, was married last Wednesday evening to Miss Lucy Inch, sister of Edward Inch of Carbondale.

David A. Rolls has been quite sick during a part of this week.

There was a good deal of excitement created last Wednesday, when it was reported that Peter Ward had struck and killed his mother-in-law with an axe. She was not killed but seriously injured, and to say the least it was a dastardly act.

A little child of John Bate, No. 6, died on Wednesday evening after an illness of only a few hours, with inflammation of the brain.

The young man at the head of 28, who got his mouth full of pie containing rock salt, won't be caught stealing anybody else's dinner very soon again.

Adam Hartwick, formerly train dispatcher at No. 20, went to Potter county, about a year ago, to work on his farm, and in a letter written to C. L. Stanton recently, he says he is doing well. He has fallen but one tree upon himself in the year, and the injury received from it only kept him in the house about two months.

WIDEAWAKE.

Lots of interesting news this week. "Full time makes everything lively along the gravity."

GRAVITY NOTES.

This has been a very busy week along the gravity.

Henry Sampson has accepted a position as headman at No. 8.

Harry Wolcott, of No. 6, left the road Saturday night and will go firing for the Erie soon.

Charlie Monk has received a pension from the government. That's right. He deserves it.

Charles Colbath is now working at No. 6.

Charles Colbath is pulling chains at No. 6.

Mr. A. B. Baker, of Hyde Park, has been visiting friends on the hill this week.

Utley Thorp has returned to the gravity and is running his train again.

Henry Sampson is now headman at No. 8

Harry Wolcott, of No. 6, now works for the Erie

Utley Thorp is again running his train on the Gravity.

Mr. and Mrs. Emery Rolls are to commence keeping house next week in F. H. Weed's house, at No. 9.

An extra train was put on the ten mile on Monday last. Jack Pierce runs it.

Mrs. John Keegan is so much better that she is able to sit up again.

Boney Thorp left the gravity last Saturday. George Williams takes his place.

Old Mrs. Donohue is still alive and improving.

Jack Pierce runs the extra train that was put on the ten-mile level last Monday.

Over 2,000 cars of coal passed over the gravity each day this week.

The Fidelity & Casualty's talking machine paid the gravity boys a visit this week and did a flourishing business.

It is reported that a certain young man at No. 9 is soon to take unto himself a wife.

Rip Van Winkle climbed the Moosic mountains on Wednesday.

"Over 2,000 cars of coal passed over the gravity each day this week."

Last Wednesday morning about 6 o'clock C. L. Stanton was at work near what is known as Ward's crossing on the light track when he discovered two large stones wedged in between the flange of the rail and the plank so that it would have been impossible for a train to pass without being thrown from the track and on that heavy grade a large wreck and loss of life would have been the result. Who the persons were that put the stones there is not positively known, but it is to be hoped that they will yet be found and punished as they deserve to be.

C. L. Stanton found two large stones wedged in between the flange of the rail and the plank at Ward's crossing on the light track last Wednesday morning.

This is the first reference we've ever seen to "Ward's Crossing" on the light track.

WIDEAWAKE

GRAVITY NOTES.

Half-time lingers in the lap of spring.

Harry Wolcott, of No. 7, has been suffering for the past week with inflammation of the bowels.

George Chapman will soon give up night watching and engage in farming.

Dell Hollis, from the Branch, is at present walking the planks at No. 3.

Mr. James Copeland is again on duty after a week of sickness.

Charles Colbath and family occupy the engineer's house at No. 6.

Alonzo Hedglin moved to Dunmore last Monday.

Arthur Taylor, of the A. & S., has this week been visiting his brother, W. F. Taylor, at No. 9.

Alex. McMillan resumed work again last Monday.

John Gunsauls, of the summit, has a child sick with scarlet fever.

Wallace Case is putting in a switchback at No. 8 for the use of the fire-room coal.

No. 4 chapel Sunday school will be organized next Sunday at 1:30 P. M.

Last Monday there were 2776 light cars run down the mountain,—the largest number ever run in one day.

Andrew Farley was on the sick list, on Wednesday.

George Perkins, wheel-runner at No. 10, has been confined to the house for two weeks.

Charlie Monk says he don't want to see his name in the paper again, but here it is.

No. 3 plane will be laid with new steel rails this week.

Ketchum says he has to stop his train to drive the crows off the head end. How is it, Charlie? **WIDEAWAKE.**

Harry Wolcott of No. 7 now suffering with inflammation of the bowels.

Charles Colbath now engineer at No. 6.

W. F. Taylor works at No. 9.

John Gunsauls works on the summit level.

No. 4 chapel Sunday school will be organized next Sunday.

George Perkins is the wheel-runner at No. 10.

Charlie Monk

Dean Hollis now works at No. 3. "Walking the planks"—not sure what his job was, possibly track inspector.

Wallace Case works at No. 8. He is now putting in a switchback for the use of the fire-room coal.


"Last Monday there were 2776 light cars run down the mountain,—the largest number ever run in one day."

New steel rails put in on Plane No. 3 this week

William Seely runs a pusher on the hill. He pushes coal into the fire rooms at 4, 5, and 7.

Friend Osborn of No. 4 has been sick with an attack of bilious fever.

First peepers of the Spring season heard at No. 9 last Tuesday. The spring peeper (*Pseudacris crucifer*) is a small chorus frog.



GRAVITY NOTES.

There is some snow left on the mountain.

Lew. Wonecott, brother of Jake Wonecott, of No. 12 was buried on Tuesday.

William Seely is at present running a pusher on the hill. He pushes coal into the fire-rooms at 4, 5 and 7.

Wood Miller, of No. 9, has been idle for a week on account of sickness.

Friend Osborn, of No. 4 has been quite sick for the past week with an attack of bilious fever.

Dunwood Travis had a toe badly smashed last Saturday week while at work near No. 2.

Peter States has again been obliged to give up work on account of a sprained wrist.

James Mahon, who has been employed at Racket Brook for a number of years, has accepted a position at the foot of 28.

John Haley, headman at No. 4, moved into William Williams' house, near the chapel, on Monday.

There will be three new boilers put in at No. 19 this week.

The little peepers peeped their first peep of the season at No. 9 last Tuesday evening.

The gravity hands between Carbondale and Honesdale were paid on Wednesday.

If you wish to enjoy a pleasant ride take Conductor Rosser's train, go over to Honesdale and return. He is always on time.

The following are the officers of No. 4 Chapel Sunday school: C. L. Stanton, supt.; John Carrell, asst. supt.; Jasper Vail, sec.; J. E. Ketchum, treas. All are most earnestly requested to attend this Sunday school and help on the good cause.

WIDEAWAKE.

Jake Wonecott works at No. 12.

Wood Miller works at No. 9.

James Mahon, who used to work at Racket Brook, now works at the foot of Plane No. 28.

Three new boilers will be put in at No. 19 this week.

Conductor Rosser's train on the Gravity to Honesdale and back is always on time.

Here are the officers of the No. 4 Chapel Sunday school.

GRAVITY NOTES.

Fred. Miles is extra headman on the mountain.

Frank Campbell, who has been employed at No. 1 ever since the road started, has accepted a position as barn boss at Powderly's.

Henry Siebolt, fireman at No. 3, has moved into the house vacated by George Correll.

Mahlon Pruner is making some extensive improvements on his property at No. 7.

Mrs. John Wilson, of Carbondale, visited Mrs. Charles Colbath, at No. 6, on Wednesday.

Tet Shafer, of No. 7, was taken quite sick on Wednesday.

The immortal words of R. E. Weed, the checker player, are "whitewash or no beat," but Wat. says if he feels well he can give him a hard row to hoe.

The young lady now taketh a basket and searcheth for arbutus, but, lo, there is none, for it is yet too early in the season.

Master Allie Stanton, and his brother Clarence, are visiting in Hyde Park, this week.

Charlie Ketchum is the boss little farmer.

Utley Thorp thinks he will try the gravity for a week and if he likes it he will stay.

Full time is the order once more, hope it may last for some time to come.

Andrew Farley's children are down with the measles.

John Medland is night watchman at No. 4.

James Cromwell has accepted a position on Milt. Shafer's train on the light track.

Friend Osborne has so far recovered from his sickness as to be able to run his train again.

R. L. McMillen is the only man with one arm that handles cars on the road, and yet there are but few men on the gravity with a better record as a train runner.

August or September Blatt is the new footman at No. 6.

Dell Hollis, of No. 3, caught a trout in Racket brook, last Tuesday, that measured over ten inches in length.

Charlie McMullen's child, who has been dangerously ill for the past week, is, we are glad to say improving.

Emery Rolls is back to No. 9 again and Ellsworth Hudson takes his place at No. 12.

Lew. Curtis is back on the road again, he tramps the ashes on No. 1 level.

There was a large flock of wild ducks on No. 4 pond this week.

The excursions over the far famed gravity will soon be in order, and from present indications there will be far more this season than ever before.

A terrible and fatal accident occurred on the ten mile level, on Wednesday, by which William Rhodes lost his life. It seems that he was trying to drive a cow from the track when a loaded coal train came along, he being old and deaf did not hear it. The cars knocked him down injuring him so badly that he lived but an hour. He lived near Keen's pond, and was highly respected by all who knew him. He was the father of Mrs. George Phillippi, of Carbondale.

Frank Campbell, who has worked at No. 1 for 54 years, has accepted a position as barn boss at Powderly's.

"The young lady now taketh a basket and searcheth for arbutus, but, lo there is none, for it is yet too early in the season."

"Full time is the order once more, hope it may last for some time to come."

"R. L. McMillen is the only man with one arm that handles cars on the road, and yet there are but few men on the gravity with a better record as a train runner."

"The excursions over the far famed gravity will soon be in order, and from present indications there will be far more this season than ever before."

John Medland is night watchman at No. 4.

"There was a large flock of wild ducks on No. 4 pond this week."

William Rhodes, who lived near Keen's Pond, was killed on the ten-mile level on Wednesday as he tried to drive a cow from the tracks.

GRAVITY NOTES.

Snow fell to the depth of three inches on the mountain this week.

John Healey is a new subscriber to the LEADER.

William Williams has a farm at No. 6.

William Williams is making some fine improvements on his farm at No. 6.

Constable James Faulkner was up the line this week on official business.

School will commence at No. 9 next Tuesday.

"School will commence at No. 9 next Tuesday."

Chirp Robbins of the Branch spent Sunday last with friends at Waymart.

There is a young man that works on the mountain who says he has his cap set for a young lady, and the first letter of the young man's name is Frank F——r.

A broken coupling at Plane No. 27 delayed the road about three hours on Tuesday.

A coupling broke at No. 27 on Tuesday and delayed the road about three hours.

James Miner of No. 9 is going back on the ten mile again.

The same car that killed Ira Stone several years ago on the light track, was the one that ran over and killed Wm. Rhodes on the ten mile level last week. The car was number 3198. This is quite a coincidence when you reflect that there are about six thousand cars in use by this company.

"The same car that killed Ira Stone several years ago on the light track, was the one that ran over and killed Wm. Rhodes on the ten mile level last week. The car was number 3198. This is quite a coincidence when you reflect that there are about six thousand cars in us by this company."

Mrs. John Bergen who has been lingering in pain for several months, passed peacefully to rest last Sunday evening. The funeral was held on Wednesday, and was largely attended. The family has the sincere sympathy of their friends in this their hour of sorrow.

WIDEAWAKE.

GRAVITY NOTES.

G. W. Baker is the authorized agent for the LEADER along the gravity road. Parties desiring to receive the paper every week should send in their names through him.—[ED.]

Arbutus is now in full bloom on the mountain.

Wm. Lee, of No. 3, has gone on the lower end with Tom. Pengally.

Jasper Vail, of No. 7, goes to No. 3 in Billy's place.

Fred. Mills takes Jasper Vail's place at No. 7.

Charlie Ball, of No. 7, has accepted a position with Henry Lippart.

Hugh Fitzsimmons, of No. 7, had one cow killed and another injured on No. 8 plane, last Saturday.

Miss Jennie Weed, of No. 9, is giving lessons in music at Carbondale.

Thomas Bate has had a child seriously ill for the past few days.

Samuel Chubb, fireman at No. 5, has been idle a part of the week with a bilious attack.

J. C. Davies has his engine No. 4 in good shape again. She shines in a new coat of paint.

Mr. James Copeland, who has served the D. & H. faithfully for a good many years, resigned his position on Thursday, on account of poor health. He will visit his home, Scotland, for which he sails next Thursday. We wish him a safe voyage, a pleasant visit and a speedy return with improved health.

Two of our gravity boys got into a little difficulty at Waymart the other night, and they are now under bail to appear at court. It was not the boys but the stuff they had taken that did the damage.

This weather reminds us that in this part of the country there are nine months of winter and three months of cold weather.

There was a large smash on the gravity, at Honesdale, on Monday.

Wm. McMullen and a party of Carbondale ladies were on the mountain last Tuesday in search of arbutus.

Justus Cary is putting an addition on his residence at No. 9.

About the time the LEADER was in the press, last Friday, a shocking scene took place on the light track, near No. 8. The following are the facts: Milton Shaffer left No. 20 with a three handed train, 88 cars, James Cromwell head brakeman, and A. D. Rolls middle brakeman. As the light trains leave No. 20 the brakes are all taken from their hooks and are left to drag, and in passing over the summit the head cars are bumped up, but, when they reach the grade the brakes on the rear of the train are always set which will cause a sudden jerk at the head end. James Cromwell was sitting on the head end of the forward car when the surge came, and he was thrown from the car to the centre of the track, and in some way his neck was caught by the head wheel and in an instant he was a lifeless corpse. As soon as the head car left the track the remaining brakemen stopped the train, and went at once to where the cars were off and there they found their comrade under the cars, his head nearly severed from the body. It was a sight that made the strongest tremble. The body was taken to the home of Milton Shaffer where everything was done that was possible for the mangled body. It was then taken to the home of the deceased at Canaan Corners, where Milton Shaffer and Charles Bailey prepared it for burial. This accident has cast a gloom over the community and at the home of the deceased an only sister is almost heart broken, for James was her main support, her mother having died about a year ago. The deceased was about 37 years old and unmarried. The funeral was held at the house on Sunday and was very largely attended. The conductor and brakeman of the train he was on, on the Lehigh valley previous to his coming here, were present at the funeral.

WIDEAWAKE.

Arbutus now in full bloom on the mountain.

Hugh Fitzsimmons, of No. 7, had two cows hit by Gravity cars on Plane No. 8 last Saturday—one injured, one killed.

James Copeland will sail for Scotland next Thursday.

"William McMullen and a party of Carbondale ladies were on the mountain last Tuesday in search of arbutus."

James Cromwell killed on the light track near No. 8. Very interesting details given here on the operation of light trains as they leave No. 20.

G. W. Baker is the agent for the *Carbondale Leader* along the Gravity road.

GRAVITY NOTES.

G. W. Baker is the authorized agent for the *LEADER* along the gravity road. Parties desiring to receive the paper every week should send in their names through him.—[Ed.]

This is the last week of half time this month.

Henry Lippart is successor to James Copeland.

Conductor Rosser, of the gravity passenger, has been off this week. Ed. Hubbard has been conducting his train.

A. D. Rolis was elected superintendent of the M. E. Sunday-school at Waymart last Sunday.

J. E. Ketchum and son, Charlie, have put a fence around his property at No. 9 this week that will defy the breaking propensities of any four-footed beast.

Jesse A. Stiles and wife have agreed to disagree, so that now he has neither wife nor tid.

W. F. Taylor has one of the best cows in this part of the country.

Thomas Quigley has moved into the house vacated by Jesse A. Stiles.

Should you wish to have a pleasant chat, call on F. H. Weed and Perry Parsons at No. 20.

If there is a man in the United States or Bengal, who can tell the difference between elm and hickory, they will confer a favor by calling at the light track slanty and deciding what that axe handle is made of.

Some of the gravity boys are up to Windsor this week loading ties.

No. 3 and 4 planes are receiving the finishing touches this week under the supervision of Henry Lippart and Justus Cary.

The trouble between our two gravity boys and the proprietor of the Rogers House, Waymart, has been amicably settled.

Those persons who tamper with the light track cars near Marshall's crossing, are requested to discontinue it; otherwise there will be trouble.

An arbutus party consisting of Mrs C. O. Mellen and son, Mrs. E. P. Auger and son, Mrs. L. Marshall, Mrs. Robert Bartlett and Miss Grace Ottman visited the Moosic mountain on Tuesday and took home the finest flowers of the season.

The teacher of No. 9 school being sick there has been no school there this week.

Rev. L. C. Floyd preached at No. 4 chapel on Sunday last, and hereafter there will be preaching the first Sunday of each month at 2:30 p. m.

Mrs. Melvin Makely, of Chicago, who has been the guest of Mrs. Henry Vail, at No. 7, for the past few weeks, returned to Jermyn on Wednesday and intends going to Chicago in a few weeks.

Mary, wife of Charles Betz, and daughter of Alexander McMillan, of No. 19, died at her home in Honesdale, last Tuesday morning, aged about twenty-seven years. She leaves two children, one two days old. Mrs. Betz was well and favorably known in this community and her sudden death will be sad news to her many friends. It is said Death loves a shining mark, and it is true in this instance, for she was a lady of a sweet and winning disposition and was beloved by all who knew her. The aged parents are bowed down under this double affliction. She was the only child left, their son Frank having died about two months ago. We extend to the bereaved parents and husband our heartfelt sympathy. The funeral was held at Honesdale on Thursday, and the remains were taken to Canaan corners for interment.

WIDEAWAKE.

Mary Betz, daughter of Alexander McMillan, of No. 19, died last Tuesday.

"W. F. Taylor has one of the best cows in this part of the country."

"Some of the gravity boys are up to Windsor this week loading ties."

Planes 3 and 4 receiving finishing touches this week.

Marshall's Crossing on the light track: not sure where this is. This is the only reference to this site we've ever seen.

An arbutus party visited the Moosic Mountain on Tuesday and took home the finest flowers of the season.



Trailing Arbutus (*Epigaea repens*) are one of the most fragrant flowers in the woods. Its leaves appear year-round, but its flowers are fleeting.

GRAVITY NOTES.

The gravity men between Carbondale and Honesdale were paid on Wednesday.

A very large fire raged around Shepherd's crook last Sunday, but it was gotten under control before any damage was done.

Frank F—r says he likes sauce first rate, but he don't like to have Sim feed it to him with a spoon.

Will Davies says the ties he helped load up the branch were as large as No. 4 bed plates and weighed something less than a ton.

Pat, of No. 4, says, "Be the hokey farmer, me name did get in the paper after all."

George Race of the light track has been braking on the gravity passenger during the absence of Henry Herbert.

Orin Gunsauls, of No. 11 foot, has been laid up for over two weeks with a sprained wrist.

Levi Bennett, the pulley tinker, is the mountain scribe. He jots down all the interesting events on the head house at No. 8.

It requires a cool head and a steady nerve to fill the position of boss headman at No. 1.

Fishing is now ripe on No. 4 pond.

Quoit pitching is the favorite pastime with the ten mile runners, but Charley Ellis, of No. 18, holds the belt.

Engine G, at Olyphant, broke a drum shaft at 5:30 p. m., on Monday and no coal was pulled up the plane until 1 p. m., on Tuesday.

Milton Shafer has a large Swan on the head end of his train, while his best man David sits in the middle.

One poor lone fisherman sat on an old raft on No. 4 pond all day Tuesday and caught one catfish that weighed something over an ounce.

W. F. Taylor expects his books this week and will deliver them to his subscribers.

Mrs. Charles Monk, of No. 4, has been suffering with a very sore throat this week.

The youngest son of James Keen died at his home near Keen's pond on Tuesday.

William Price has been promoted to the position of headman at No. 9.

Andrew Farley's apple orchard at No. 9 has been much improved this week under the skillful trimming of Jess Cary.

The Waymart boys think that Windsor is a poor place for a picnic.

Mr. R. Pierce and wife, of Greenfield, and Mrs. Henry Clum and daughter, of Carbondale, were the guests of Mr. Henry Vail, at No. 7, Saturday and Sunday last.

Some thieves entered the house of Mr. Frank Wolcott, at No. 7, a few nights ago and stole some clothing and a very fine accordion that belonged to Harry. They silenced the watch dog by giving him chloroform and effected an entrance by prying open one of the parlor windows with a pick. It was a lucky thing for them that Harry was not disturbed, for had he caught them, there would have been no prolonged trial. The thieves are still at large. **WIDEAWAKE.**

Thieves broke into Frank Wolcott's house at No. 7 a few nights ago.

"Orin Gunsauls, of No. 11 foot, has been laid up for over two weeks with a sprained wrist."

Levi Bennett, the pulley tinker, gathers information at No. 8 for *Gravity Notes* for the *Carbondale Leader*. What did a pulley tinker do? Possibly adjust or make repairs or improvements to the wire rope cables in the inclined planes?

"Engine G, at Olyphant, broke a drum shaft at 5:30 p. m., on Monday and no coal was pulled up the plane until 1 p. m., on Tuesday."

"Milton Shafer has a large Swan on the head end of his train, while his best man David sits in the middle."

"One poor lone fisherman sat on an old raft on No. 4 pond all day Tuesday and caught one catfish that weighed something over an ounce."

The youngest son of James Keen died on Tuesday at his home near Keen's pond.

Very large fire around Shepherd's Crook last Sunday

GRAVITY NOTES.

Gravity workers will again be on half time.

We were a little previous in regard to full time for the rest of this month, for half time is again ordered.

Robert Swan will occupy Alexander Ball's house at No. 9, formerly owned by Morris Hurley.

Mrs. Milton Shaffer, of No. 9, spent Monday and Tuesday with friends at Carbondale.

Very interesting prayer meetings are held at No. 4 Chapel on Sunday evenings. The Carbondale people are invited to come up and help us in the grand work.

Harry Wolcott, formerly of No. 6, is twisting brakes on the branch.

Dell Hollis, of No. 3, quit last Tuesday, after a few week's stay on the gravity.

F. M. Osborn, of No. 4, has a little girl seriously ill.

A light train ran off the track near the foot of D, on Monday, and made quite a wreck, no one hurt, but the runner was p-pr-pr-pretty badly frightened.

The forest fires have burned over the greater part of No. 4 mountain this spring, and huckleberries will be scarce.

F. H. Weed, No. 20 engineer, has just purchased from the widow of the late Alexander McLean, of Carbondale, a very fine lathe. He expects to build a small engine to run it, and when it is completed he will be able to turn out any kind of work, from a knitting needle to a drum shaft.

Ex-Governor St. John, of Kansas, passed over the gravity last Tuesday afternoon, and lectured in Honesdale in the evening. Mr. H. W. Powderly kindly gave him all the information possible in regard to the running of cars over the mountain, and he seemed very much interested in the way coal and passenger trains were drawn up the planes. He is one of the greatest temperance workers in this country.

WIDEAWAKE.

The engineers at the heads of the Gravity planes usually lived near the heads of the planes, where small communities sprang up. Over the years, distinct settlements developed at the head of No. 4 and No. 9, for example. The Chapel at the head of No. 4 was an important religious and community center.

Light train ran off the track near the foot of D on Monday. No one hurt.

F. H. Weed, No. 20 Engineer, has just purchased a very fine lathe from Alexander McLean's widow.

Many forest fires on No. 4 mountain this spring. Huckleberries will be scarce.

Ex-Governor St. John, of Kansas, one of the greatest temperance workers in this country, passed over the Gravity last Tuesday afternoon and lectured in Honesdale in the evening.

	<div style="border: 1px solid black; padding: 5px; text-align: center;">GRAVITY NOTES.</div> <p>The May apple bushes are now in bloom at No. 9.</p> <p>Doc. Avery has this week joined the Mulligan Guards at No. 3.</p> <p>Charlie Monk is a new subscriber to the LEADER this week.</p> <p>Mr. Pierce Butler thinks a reporter would do well to visit the mountain boys and get items.</p> <p>John Foster, No. 6 engineer, is improving in health and the prospects are that he will live to see another new roof put on his engine house. So be it.</p> <p>Wm. Morss, jr., has been assisting W. K. Allen at the Racket Brook weigh scales for the past two weeks.</p> <p>Milton Shaffer spent Sunday last with friends at No. 12 on the Pennsylvania gravity.</p> <p>Charlie Bailey is getting to be a good violin player but the boys don't seem to exactly feel inclined to think so.</p> <p>Thomas Marshall, foreman at No. 4, has been suffering with a severe attack of rheumatism this week.</p> <p>Judson Foster, who has been employed on the gravity for a number of years, has accepted a position on the branch.</p> <p>Nearly one-half mile of new rail was laid on the light track near Yarrington's, the last three days of last week under the supervision of Wm. McMullen.</p> <p>There is a good deal of snuff used at the foot of No. 12 when the cars are moving.</p> <p>The spirit of improvement seems to have taken a strong hold of some of the gravity men, for George Shreehan is putting a large addition on his house at No. 8 and many others are to follow suit during the summer.</p> <p>There will be preaching at No. 4 chapel next Sunday afternoon at 2.30.</p> <p>Peter State, of No. 9, has a little daughter seriously ill.</p> <p>Charles Blott, No. 4 fireman, met with an accident last Friday while at work in the shop at Carbondale, that confined him to the house until Wednesday noon.</p> <p>A spur wheel shaft was found cracked at No. 6 last Wednesday morning, and there was no coal pulled up the plane until 11.30 A. M. The passenger was only 50 minutes late.</p> <p>Conductor Rosser of the gravity passenger assisted Conductor Skeels on the valley train last Wednesday.</p> <div style="text-align: right; font-size: small;">WIDEAWAKE.</div>	<div style="border: 1px solid black; padding: 5px; margin-top: 10px;">". . . the Mulligan guards at No. 3." What was this group?</div> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;">John Foster was the engineer at No. 6.</div> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;">"Milton Shaffer spent Sunday last with friends at No. 12 on the Pennsylvania gravity."</div> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;">"Nearly one-half mile of new rail was laid on the light track near Yarrington's, the last three days of last week under the supervision of Wm. McMullen." Where was Yarrington's?</div> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;">"A spur wheel shaft was found cracked at No. 6 last Wednesday morning and there was no coal pulled up the plane until 11:30 A.M. The passenger was only 50 minutes late."</div>
<div style="border: 1px solid black; padding: 5px; margin-top: 10px;">Manning the weigh scales at the Racket Brook breaker for the past two weeks have been William Morss, Jr. and W. K. Allen.</div>		

GRAVITY NOTES.

The scenery along the line of the gravity is just grand.

John Thomas, of Pittston, has been the guest of Eugene Shaffer, at No. 9, for the past few days.

Rev. L. C. Floyd preached one of the best sermons at No. 4 chapel last Sunday, ever delivered there.

Miss Olive Rolls, daughter of R. D. Rolls, of No. 10, has been very near to death's door for the past week but we are glad to hear that she is a little better at this writing.

William Fox, of No. 18, met with a very serious accident last Sunday evening. He was crossing between the loaded and light track, at the foot of 11, on a plank that reached from one track to the other over the wagon road, and when he reached the middle of the plank it broke, letting him fall into the road a distance of 12 or 14 feet. His upper teeth were nearly all knocked out and one arm sprained so badly that he has not been able to move it since.

The gravity road was never in better condition than at the present time, especially the mountain line. The planes are being very much improved under the management of Henry Lippert.

Mr. George Chapman has accepted a position at Racket Brook breaker.

Nicholas Flood, sr., is a great fisherman.

Mr. Lucius Stanton, of Waymart, has a little child seriously ill.

John Carrell, of No. 6, has this week been suffering with the rheumatism.

Mrs. Daniel Gorman, of Waymart, departed this life last Tuesday evening. She had been suffering with consumption for several months.

Mrs. Melvin Maklay, and Mrs. John Maynard and two children, of Jermyn, have been the guests of Mrs. Henry Vail, at No. 7, the past week.

WIDEAWAKE.

The chapel at No. 4 was a very dynamic house of worship.

"The gravity road was never in better condition than at the present time. The planes are being very much improved under the management of Henry Lippert."

William Fox of No. 18 was in a serious accident last Sunday evening: "He was crossing between the loaded and light track, at the foot of 11, on a plank that reached from one track to the other over the wagon road, and when he reached the middle of the plank it broke, letting him fall into the road a distance of 12 or 14 feet." Very interesting details about this section of the Gravity tracks.

GRAVITY NOTES.

This is to be a full week for the gravity boys.

The men employed between Carbondale and Honesdale were paid for the month of May on Tuesday.

Mr. Geo. Shreehan requested us to say, that he has come to the conclusion that boiled eggs will produce chickens that know enough to attend to their own business under all circumstances.

Some of your subscribers say they don't like the gravity notes, but we notice they are anxious to read them nevertheless.

The fish are said to be dying in Stanton Pond.

Mr. Henry Peters, of No. 2, was complimented for his excellent playing in the left field, during the ball game at Carbondale, last Friday.

Mr. Charles Quinn, who died at Carbondale last Monday morning, was a brother-in-law to Andrew Farley, of No. 8.

No. 9 school house was filled with people last Wednesday evening, to witness a magic lantern exhibition. It was said to be first class.

Henry Lippart, Charles Blott, and Justus Carey, now take the LEADER. Additions to the subscription list each week.

Hi. Inch and his men are this week making some repairs on the light track between No. 5 and Shepherd's Crook.

Miss Olive E. Rolls whose dangerous illness was noticed in our last letter, passed away from earth one week ago last evening,—aged 20 years, 3 months and 17 days. She was the only daughter of Mr. and Mrs. R. D. Rolls, of No. 11 foot. She was a young lady that had a large circle of friends who will be saddened by the death of one of their number. We extend to the bereaved parents and friends, our sincere sympathy in their affliction.

Mrs. A. D. Rolls met with a very serious accident last Saturday on the return from the funeral of Olive Rolls. She was getting out of the wagon at her home, and, as she went to step upon the ground, her dress caught in some manner, throwing her in such a way that she struck upon the back of her head, and sustained injuries that will necessitate quiet for several weeks.

Alexander McMillen, engineer at No. 19, died at his home, near Waymart, last Wednesday evening, of quinsy,—aged about 78 years. Mr. McMillen was born at Montrose, Susque. co., in the year 1805, and there he spent his boyhood days. He came to Wayne county when the D. & H. C. Co. was in its infancy and helped to clear a place on the old summit where the gravity road was first built. After the road was finished and the coal began running over it he took the wheel at what was known as "middle Six," which position he held until the loaded track was changed to where it now is. He then took the wheel at No. 10 which he ran for several years. He was then sent to No. 9 and run the wheel there until the engines were built that pulls the light cars from Waymart to the Summit. He was then promoted to the position he held up to the time of his death. He was the oldest man employed on the road, and one who had been faithful to his employers under all circumstances. He was a man respected by all for honesty and uprightness in every transaction;—he always had a pleasant word for every one, and will be missed by those who were employed under him, as well as by every one in this community. He had enjoyed good health the greater part of his life until about a year ago since when he had several sick spells. Trouble seemed to come to him thick and fast for the past four months; for in that time he had lost by death a son, daughter and sister. He was taken sick last Sunday and only lived three days. We would extend to the bereaved wife our heartfelt sympathy in this hour of her intense sorrow. May the one that "doeth all things well" comfort and sustain her. The funeral will be held from the house this (Friday) afternoon at two o'clock.

WIDEAWAKE.

Death of Alexander McMillen, engineer at No. 19. Long and distinguished career with the D&H Gravity Railroad. "He came to Wayne county when the D. & H. C. Co. was in its infancy and helped to clear a place on the old summit where the gravity road was first built." At age 78, he was the oldest man employed on the road.

Magic lantern exhibition at No. 9 school house last Wednesday

Repairs being made to the light track between No. 5 and Shepherd's Crook

Olive E. Rolls, age 20, of No. 11 foot, has passed away.

GRAVITY NOTES.

This is another full week on the gravity.

Mr. Frank Harrington, of New Hampshire, has accepted a position as extra headman on the mountain line.

Philander Swingle, of No. 12, had a finger badly smashed last Monday by having it caught in a car wheel.

Samuel Bryant is the new engineer at No. 19, and his fireman is Ben. Boils.

Thomas Fitzsimmons, formerly one of the gravity boys, but now a successful student in a medical college in New York city is visiting his parents at No. 7. We congratulate him on his prospects for a successful life as a professional man.

George Simroll took his little daughter Edna to Honesdale, on Wednesday, to be treated for weak eyes.

Miss Ada Wagner, of South Canaan, is visiting her sister, Mrs. Samuel Chubb, at No. 5.

Miss Nellie Freeman, of Scranton, spent Sunday last with her uncle C. L. Stanton at No. 8.

Mr. George Wager, of the ten mile level, is a good eye doctor.

Mr. Henry Ames, of Waymart, met with a great loss last Monday night by having a pair of twin heifers, 3 years old, struck by lightning, they were both instantly killed.

There was a picnic at Waymart, on Wednesday, from Seeleyville and one at the same place yesterday from Scranton.

The last light train ran over a cow down at the powder mill last Monday night, wrecking 11 cars, but no one injured.

The lightning struck a telegraph pole very close to Jess Cary's residence last Monday night, scattering the splinters in all directions. He said he heard the thunder, very likely he did.

Some evil disposed person set fire to a pile of slabs belonging to Mr. Alexander Ball, at No. 9, last week. What their object was I cannot say unless they could find nothing meaner to do.

Conductor Rosser's train now leaves Honesdale at 3:15 P. M., instead of 3 o'clock as heretofore. His time at No. 5 is 4:15 P. M.

There should be some kind of a shelter built at the high-works at No. 5 for the accommodation of those who are obliged to wait there for the passenger.

The field strawberries are beginning to ripen on the mountain, and prospects are good for a large crop this year.

Robert Swan is bound to beat the Dutch in raising cabbage this summer.

The funeral of the late Alexander McMillen was largely attended from the house, last Friday, at 2 P. M. He was a prominent mason—the members from the lodge at Waymart turning out in a body, together with a number from the Carbondale lodge. Rev. L. Cole, of Waymart, preached an eloquent sermon. The following gentlemen, gravity engineers, also members of the order, acted as pall bearers: G. W. Sampson, P. J. Foster, E. Y. Davies, J. C. Davies, Thomas Nicols and Charles Ellis. The remains were laid to rest in the burying ground at Canaan Corners.

WIDEAWAKE.

Thomas Fitzsimmons, formerly a Gravity employee, is now a student in a medical college in New York.

Samuel Bryant is the new engineer at No.19.

Twin heifers belonging to Henry Ames of Waymart were struck and killed by lightning last Monday night

Two picnics at Waymart

Eleven cars wrecked when light train ran over a cow at the powder mill last Monday night

Shelter for passengers needed at the high works at No. 5

Six Gravity engineers, all Masons, were the pall bearers at the funeral of Alexander McMillen.



Wild Strawberry, *Fragaria vesca*. "The field strawberries are beginning to ripen on the mountain, and prospects are good for a large crop this year."

GRAVITY NOTES.

Three idle days this week on the gravity.

Mr. and Mrs. W. F. Taylor spent Sunday last with friends at Greenfield.

Mrs. M. D. Rolls has so far recovered as to be able to walk out.

Mr. and Mrs. John Smith, of Honesdale, and Miss Allie Miller, of Hawley, spent Sunday last with Mr. and Mrs. Charles Monk at No. 4.

H. W. Powderly is suffering with a very sore leg. He had it injured several years ago while running cars, and it still troubles him.

Nicholas Wayman, of Greenfield, put up a very comfortable summer kitchen for W. F. Taylor last week.

Rev. L. C. Floyd is expected to preach at No. 4 chapel next Sunday at 2.30 p. m. all are welcome.

Mrs. Jennie Berry, of No. 9, returned from Pittston, on Saturday last, where she had been visiting for the past two weeks.

There will be three new boilers put in at No. 1 this week.

The excursions over the gravity have been poorly patronized thus far this season.

Mrs. Patrick Manion, of No. 12, who has been seriously ill is slowly improving.

Barney Brennan, a young man employed as patcher at the Switchback, had his shoulder blade broken on Wednesday last by being thrown from the cars.

Frank Harrington is well pleased with the gravity.

There is a prospect of better times for railroad men, the coal and iron trade being in a better condition than for some time according to recent reports.

The account of the LEADER boys' experience in fishing at No. 7 pond in last week's paper, reminds us of a rattlesnake hunt that three of the light track boys had about three weeks ago. It was a very warm day and they thought the snakes would surely be out on the rocks at the den, and after stumbling over rocks and climbing the steep mountain they came to what they supposed to be the den. They then began jumping around on the rocks in the hope of making some of the snakes sing one of their sweet songs. But alas for the anticipations, no snake appeared (and it was a good day for snakes too) and after sitting down on the rocks for a rest after their long walk and Indian war dance, they returned to the shanty and were informed by those who knew, that they had not been within at least a half mile of the snake's den. Undoubtedly the snakes were not disturbed. The names of these three brave men were Charles Bailey, captain, George Race, Surgeon, and G. W. Baker behind with a club.

John Tonkin, employed as track hand for Henry Lippert, had his leg injured on Wednesday, by jumping off the cars between the Switchback and Hendrick's depot.

WIDEAWAKE.

"There will be three new boilers put in at No. 1 this week."

Barney Brennan—a patcher at the Switchback. Which one, I wonder? No. 5? No. 9?

Three light track boys—Charles Bailey, George Race, and G. W. Baker—go rattlesnake hunting.

". . . between the Switch- back and Hendrick's Depot."

GRAVITY NOTES.

A very large excursion on the fourth, and a good deal of rain.

Mrs. Mary Ann Thomas, of Pittston, is the guest of Mrs. Milton Shaffer, at No. 9.

John Batenan, formerly of No. 3, has gone on the lower end with Murfee.

Owing to pressing business we have been unable to gather very many items this week, but look out for the next.

An excursion train with 3,000 people on board over the gravity road from Carbondale to Honesdale without a single accident, speaks for itself in regard to the management of the road.

WIDEAWAKE.

An excursion train with 3,000 people from Carbondale to Honesdale and not a single accident.

GRAVITY NOTES.

It is just possible that this will be the last week of half time for awhile.

Frank Harrington has left the gravity and gone to work in a factory in Scranton.

George Tonkin has accepted a position at No. 3.

Mr. William Phillips, of No. 5, was presented with a son last week.

John Milligan, jr., has been promoted to the position of runner on a shaft train with David Jenkins.

Sam Foster is the new assistant runner on No. 1 level.

R. E. Weed, train dispatcher at No. 20, is up on his farm in Clinton, this week, in the hay field.

John Tonkin who was injured two weeks ago by jumping off the cars is still unable to walk.

C. W. Miller, wheel-runner a No. 9, moved into his new house last Saturday.

Mr. Edgar Smith had a very valuable cow killed by the cars on No. 1 plane, on Monday last.

Mr. Wm. McMullen, master of transportation, had a severe attack of cholera morbus last week, but he is now able to be around again.

Wallace Dimock, foreman of the mountain line, spent Sunday last with friends down the valley.

Mrs. Wm. Clifford and Mrs. G. W. Baker, of Carbondale, visited Mrs. C. L. Stanton, at No. 8, on Wednesday.

Alexander Ball, jr., of Port Jervis, is visiting his father, at No. 9.

And now the boys call him "Never-sweat."

The gravity men between Carbondale and Honesdale were paid on Monday, and the shop men on Wednesday, of this week.

Cap. Race, of the light track, was a brakeman on the passenger Wednesday.

Rev. L. C. Floyd paid some of the gravity men a short visit on Tuesday forenoon.

Ed. Hubbard has a very fine boat on No. 4 pond.

George Tonkin now works at No. 3.

"Sam Foster is the new assistant runner on No. 1 level."

"Mr. Edgar Smith had a very valuable cow killed by the cars on No. 1 Plane, on Monday last."

Wallace Dimock is the foreman of the mountain line, i. e., the Gravity Railroad.

Henry Vail, engineer at No. 7, intends moving to Carbondale in a short time.

Mr. Lew. Hubbard has recently been making some improvements on his property at No. 4.

John Fitzsimmons, of No. 7, has as fine a two-year old colt as you will find in Wayne county.

James Spry, of Waymart, had a small sum of money stolen on the Fourth by some of the excursionists.

Haying is now in order and most of the boys have some ~~of it~~ to do.

Huckleberries are beginning to ripen but the crop is small.

Some of the boys say they would like to have gone up in the balloon at Honesdale on the Fourth, but for our part No. 8 is high enough in the air for us.

Look out for something grand in the shape of an organ at the light track shanty in a few days.

The people around No. 9 had a good view of the balloon when it ascended from Honesdale on the Fourth.

Henry Williams thinks Dan Gray is a poor judge of horses.

Mr. Charles Monk and wife, Malon Pruner, and wife, and Miss Jennie Monk attended the funeral of their brother-in-law, John Siegraves, at Stuartsville, Warren co., N. J., on Saturday last, returning home on Monday. On their way home they visited the Beatty organ establishment at Washington, N. J.

WIDEAWAKE.

Henry Vail is the engineer at No. 7 plane.

"Huckleberries are beginning to ripen but the crop is small."

"The people around No. 9 had a good view of the balloon when it ascended from Honesdale on the Fourth."

"The gravity men between Carbondale and Honesdale were paid on Monday, and the shop men on Wednesday, of this week."

The cumulative effect of these *Gravity Notes*, week after week, is heart-warming / compelling.

You really get the feeling that there was a lot of camaraderie among the Gravity workers. Most of them seem to know each other and enjoy each other's company.

GRAVITY NOTES.

Now we are settled down to full time again.

H. W. Powderly has been confined to his house for several days, but we are glad to say that he is now able to be out.

Thomas Marshall is filling the position of rope-rigger during the disability of H. W. Powderly.

Charley Bailey fills the position of boss headman at No. 4.

Geo. Tonkin has been changed from No. 3 to the light track.

Alonzo Hedglin, of Dunmore, called on friends at No. 4 on Sunday last.

Silas Wegg, of the *News*, had better procure a tie pass before he starts on his journey over the Moosic.

Sid. Colwell, from the "lower end," is resting himself in the hay field on the Durfee farm near No. 8.

Mrs. Charles Blott, of No. 6, has been seriously ill this week, but at this writing she is improving.

Miss Mamie Hitchcock, of Scranton, is the guest of Miss Carrie Shaffer, at No. 9.

David Wolcott left the gravity on Monday last and will help his father through haying.

That organ for the light track shanty came and behold it is nothing but a mouth-organ. *Sold again.*

No. 8¹ head is 2,000 feet above tide-water.

Potatoes are looking good all along the line.

F. M. Osborne finished a very fine writing desk this week

WIDEAWAKE.

George Tonkin, formerly working at No. 3, now works on the light track.

The head of Plane No. 8 is 2,000 feet above sea level.

GRAVITY NOTES.

The Gravity Railroad men are now working full time again.

Full time males every one contented along the line.

J. C. Davies, of No. 4, had another severe attack of neuralgia of the stomach on Monday.

Miss Fannie Hovey, of Norwich, N. Y., is the guest of Mr. and Mrs. P. J. Foster, on No. 1 hill.

Robert Swan was on the sick list for two days this week.

Wm. Morss jr. is permanently situated as assistant to W. K. Allen, at Racket Brook weigh office.

Hiram Inch is the foreman of the Waymart track men.

Hiram Inch, foreman of the Waymart section of track men, attended the funeral of his brother-in-law at Peckville, on Tuesday.

Conductor Rosser, of the gravity passenger, takes a fresh supply of water at the cold spring on the Summit, every morning.

Mrs. Nicholas Flood, of No. 4, has been dangerously ill for the past week, but she is getting better again.

A Hungarian, whose name we did not learn, was instantly killed by the cars near the foot of E. on Monday last.

Miss Jennie Weed, of No. 9, has been having a slight attack of bilious fever, for the past few days.

Old Mrs. Donahue is lying dangerously ill at the residence of her son-in-law, Thomas Quigley, near No. 4.

Wm. Fox, who was injured several weeks ago, by falling from a bridge at No. 11 foot, returned to work on Monday last.

Rev. L. C. Floyd preached at No. 4 Chapel last Sunday, and administered the sacrament of the Lord's supper. The attendance was small. Now there is enough people at No. 4 to fill the Chapel. Why don't they turn out? Echo answers, why?

Rev. L. C. Floyd preached at No. 4 Chapel last Sunday.

James Durick has accepted a position at No. 3.

Dot leetle Dicherman mit his leetle tog, is trying to catch No. 4 bond from all de leetle fishes oud.

F. M. Osborne makes the best ink in the world.

"F. M. Osborne makes the best ink in the world."

Charlie Monk says the mosquitos are very numerous around his place. They sharpen their bills on the slab fence, and then come to the door and sing, "Charlie ere you go to bed, cover thy defenceless head."

There is a pound up here on the hill and many of the cows that run the road are put into it. Their owners do not object so much to having their cows pounded, but they do object to having them shut up where they cannot get a drink of water.

"There is a pound up here on the hill and many of the cows that run the road are put into it. Their owners do not object so much to having their cows pounded, but they do object to having them shut up where they cannot get a drink of water."

Doc Avery, of No. 3, got his foot in the wheel last Friday, disabling him from work for several days.

A. B. Durfee's hay is being put in the barn in first class order this year.

Fred. Shaffer, of No. 8 foot, was severely injured on Saturday last. He jumped on a loaded trip as it started up the plane, to let off a brake, and, in some manner his foot slipped and caught on the spoke of the wheel under the truck. One toe was broken, and his foot otherwise cut and bruised. He will be laid up for some time, but he can consider himself fortunate that it is not worse.

Some boys threw stones at the windows of No. 4 Chapel last week, breaking out several panes of glass. The boys were seen there throwing the stones, but for the sake of their parents no action has as yet been taken in the matter. But now to whom it may concern:—Any person who will give reliable information to C. L. Stanton or John Carrell, convicting any person of throwing stones at the Chapel, a liberal reward will be paid. Parents will take notice and warn their children not to throw stones at said Chapel, for if caught in the act, they will be dealt with to the full extent of the law.

Boys seen throwing stones at the windows of No. 4 Chapel

WIDEAWAKE.

GRAVITY NOTES.

The M. E. Sunday school had a very pleasant time at Prompton last Friday.

Miss Mary Finton, of New York city, is visiting her brother John Finton at No. 4.

→ Charlie Ball, of Henry Lippert's gang, who was working temporarily in Fred Shaffer's place at No. 8 foot had his big toe badly hurt by getting it under a loaded car wheel last Friday.

Doc. Avery resumed his position at No. 3 on Monday last.

A better natured crowd never passed over the gravity than the one from down the valley last week Thursday.

James Foster has this week put up a very fine porch on the residence of J. C. Davies at No. 4.

John Tonkin went to work on Monday last for the first time since he was injured.

H. W. Powderly is again on duty.

If Silas Wegg, of the *News*, travels on the strength of his beauty only, we don't think he will go far.

Peter Ward, who has been spending some time in the city returned to his home near No. 4 pond, on Monday.

→ Legrand Wright, formerly engineer at No. 16, but now engineer at the Dickson works at Scranton spent Sunday last with R. E. Weed at No. 9.

Fred. Shaffer is improving very fast. He will soon be able to step on his foot.

Mrs. Geo. Chapman, of No. 6, returned home on Monday from several days' visit with friends in Wayne county.

Supt. Larabee, of Wayne county schools and Prof. Dooly, principal, of Waymart Academy, paid a visit to No. 9 school on Tuesday last.

A team belonging to Dr. Niles, of Waymart, became frightened and ran away on Monday last throwing the Dr. out and smashing the buggy to atoms. The Dr. was only slightly injured.

There will be no preaching at No. 4 chapel on Sunday next, but Sunday school as usual.

Charley Clark and Yank Histed, of the Branch, passed over the gravity, on Friday to Stanton pond, returning on Saturday with a fine mess of catfish.

R. L. McMillen is getting high-toned. He has a canary bird in his shanty at No. 8.

Mr. and Mrs. W. F. Taylor, of No. 9, entertained friends from Greenfield on Sunday last. WIDEAWAKE.

Charlie Ball, who has been working in Fred Shaffer's place at No. 8 foot, had his big toe badly hurt last Friday.

← "Supt. Larabee, of Wayne county schools, and Prof. Dooly, principal, of Waymart Academy, paid a visit to No. 9 school on Tuesday

Legrand Wright, who used to be the engineer at No. 16, now works at the Dickson works at Scranton.

← "R. L. McMillen is getting high-toned. He has a canary bird in his shanty at No. 8."

Samuel Penwarden was a conductor of the Honesdale passenger train.

There were night watchmen in the engine houses on the Gravity line. Fred Kepler was night watchman at No. 6.

GRAVITY NOTES.

Well, no, Silas Wegg, we are not badly frightened.

Samuel Penwarden, of the Honesdale passenger train, has been off for a week on a vacation. Cyrus Hobbs has been filling the position of conductor.

Some of the boys felt slighted because their names were not in the LEADER last week. Never mind, boys, time enough yet.

Fred Kepler, night watchman at engine No. 6, had a severe attack of cholera morbus on Monday last.

Justus Cary spent Sunday last with his sister near No. 12 Penn. gravity road, who is seriously ill.

Emery Rolls returned to his position at No. 9, on Monday, after a week of sickness.

James Durick, of No. 3, has resigned his position.

Morris Lavey, formerly on the gravity but who has been at Bridgeport, Conn., for some time, has returned and accepted a position with Henry Lippert.

We are glad to be able to say that Mr. Mark Inch, who has been very low with typhoid fever, is slowly improving.

Wm. Burdick, who was some years ago a resident of No. 4 hill, has accepted a position at No. 3.

Fred. Shaffer had so far recovered from his late injuries as to be able to resume work on Tuesday last.

Sid. Colwell, from the lower end, has been to Williamsport this week with the soldiers.

James Vannan, engineer at No. 1, has been having a vacation for a week.

Mrs. A. D. Rolls, of No. 11, has been visiting her mother, Mrs. Samuel Tilsley, of Carbondale, this week.

Thomas Stiles, of No. 4, was on Friday last presented with a daughter.

The youngest son of George Shreehan fell down upon the ground on Tuesday last breaking his elbow.

Robert Swan is a new subscriber to the LEADER this week. Who will be the next?—only \$1.60 a year.

F. H. Weed, engineer at No. 20, is doing some first class work on his new turning lathe.

Boyd Tuthill who was injured by the cars several weeks ago in the foot of No. 18 is still unable to walk.

Thomas Marshall, foreman at No. 4, is again suffering with a severe attack of rheumatism.

The Trinity church Sunday School, of Carbondale, had a lovely day for their picnic on Wednesday, and had a good time.

G. H. McMinn, foreman at No. 2, was on the sick list on Wednesday.

Frank F. felt very much slighted because he was not invited to a certain party down town the other night, and taking everything into consideration it is hard to blame him for being slighted.

The telegraph instruments for No. 9, came, and are working to perfection. The Western Union will soon be able to find expert operators on the gravity.

Eleven well filled cars of excursionists from up north, passed over the gravity last Saturday, to Honesdale and return. They expressed themselves as being well pleased with this road, and an old gentleman from Susquehanna said it was the finest ride he had ever taken.

WIDEAWAKE

"The telegraph instruments for No. 9 came and are working to perfection. The Western Union will soon be able to find expert operators on the gravity."

Eleven well filled cars of excursionists "from up north" on the Gravity last Saturday.

William Burdick now works at No. 3.

James Vannan is the engineer at the head of Plane No. 1.

F. H. Weed is the engineer at the head of Plane No. 20.

GRAVITY NOTES.

The shrill voice of the cricket is heard in the land.

Hello, "Mountaineer," we did not know that we had stepped on your toes. We may have touched the color of your hair.

Mrs. Richard Udy, of No. 8 foot, is visiting her daughter, Mrs. Miner Stark, at West Nicholson.

Charley Ball, of Henry Lippert's gang, resumed work on Monday last.

Joseph Wilcox and family, formerly of Carbondale, have taken rooms in the Marshall cottage, at No. 4.

Thomas Flood and Miss Mary White, of No. 4, were united in marriage on Wednesday last.

Warren Tappen has been making some needed repairs on Racket Brook Breaker for the past week.

F. H. Weed, of No. 20, is constructing a pully car which will, when completed, take the cake. It is made with a spur wheel attached to the head pully and a crank on either side of the spur wheel so that a person can propel it up grade at a rapid rate of speed.

The D. & H. are about to build a fence along No. 1 plane

Will. Knapp, fireman at No. 1, has been quite sick this week.

Old Mrs. Donohue died at the residence of her son-in-law, Thomas Quigley, near No. 4, on Monday evening last. We have not been able to get her exact age, but she was over 90 years old.

It is with sadness that we are called upon to announce the death of Annie, youngest daughter of Mr. and Mrs. A. D. Rolls, which occurred at the residence of Mr. Samuel Tillsley, on Saturday evening last. Mrs. Rolls was on a visit to her parents, and had been there but a short time when little Annie was taken down with cholera infantum. The best medical aid was summoned but without avail, and the little pet of the home was taken away from earth. She was one year six months and five days old, and a very bright child, for one of her age. Mr. and Mrs. Rolls have the sympathies of a large circle of friends in this hour of their overwhelming sorrow. The funeral was held at Carbondale, on Monday. Rev. Mr. Davis, of the Welsh Congregational church, officiating. Interment at Canaan corners.

Sweet Annie, our treasure, we laid her to rest,
But her spirit has gone to the land of the blest.
With angels she's roaming the golden streets
now,
While garlands of whiteness encircle her brow.

WIDEAWAKE.

A weekly column of Gravity Railroad news was also written by "Mountaineer." Did that column begin with this issue of the *Carbondale Leader*?

"F. H. Weed, of No. 20, is constructing a pully car which will, when completed, take the cake. It is made with a spur wheel attached to the head pully and a crank on either side of the spur wheel so that a person can propel it up grade at a rapid rate of speed."

"The D. & H. are about to build a fence along No. 1 Plane."

Annie Rolls dies with cholera infantum, aged one year, six months, and five days old. The Rev. Mr. Davis of the Welsh Congregational Church of Carbondale officiated at the funeral.

Chris Powderly, son of H. W. Powderly, is the new weigh-master at Racket Brook breaker.

GRAVITY NOTES.

This is the last day of summer.

Politics are in full bloom at No. 9.

There will be preaching at No. 4 Chapel next Sunday at 2:30 P. M. All are welcome.

A new gang of section men will be put on the light track next week.

Yet. Bailly, who has been fireman at No. 2 for some time, has been promoted to the position of assistant engineer, a promotion well deserved.

Will. Knapp has resigned his position as fireman at No. 1.

Thomas Lavey has accepted a position with Henry Lippert.

Mr. and Mrs. F. M. Osborn spent Sunday last with friends at South Canaan.

James Fitzsimmons, of No. 10, purchased a Standard organ of Guernsey Bros. last week.

George and William Hapeman, of Pittston, were the guests of Mr. and Mrs. Milton Shaffer, at No. 9, on Sunday last.

Samuel Chubb, fireman at No. 5, was on Sunday last presented with a young fir—Oh, shaw no, it is a girl.

Al. Stone, of No. 3, will join Burrell's carpenter gang to-morrow.

H. W. Powderly, W. P. E. Morss and J. C. Davies held a clam bake at No. 4 engine last week. One of the party ate more clams than agreed with him and was sick for two or three days. In connection with the clam bake there was a good joke. For further particulars inquire at the undertaking establishment of J. C. D.

Harry Dimock, who has been night watchman at No. 1 engine on the gravity road for over fifteen years, leaves his position after to-night to accept a position as night watchman for E. E. Hendrick at his oil works in this city.

A. B. Baker, formerly a gravity man but now of the D. L. & W. machine shop at Scranton, paid us a flying visit on Monday.

Chris. Powderly, son of H. W. Powderly, is the new weighmaster at Racket Brook breaker. He is but a small boy but can sling the ink like a professor.

Extra fireman Barney Sontag handled the scoop at No. 8 on Wednesday last. It was the first time he had been at No. 8 to fire and when the engineer told him to oil the long shaft he did not know where it was, but he said to the engineer "I can found it out if you dole me de place where it ish."

The Western Union linemen are repairing the wire over the mountain. The poles have been changed on No. 7 level so that the wire now runs along the parallel railroad. Perhaps engineer Blake of the valley road can tell us what a parallel railroad is.

The four Hungarians employed as track hands for Henry Lippert keep house in a small shanty on the high works near the car shop.

J. E. Ketchum and C. L. Stanton have purchased a field of grass of Frank Wolcott, at No. 7, and are cutting it this week. Better late than never boys.

Robert Swan has thrown his cabbages over the garden wall.

Levi Bennett went on the Niagara Falls excursion. He only stayed three days.

John Fitzsimmons, of No. 7, was quite seriously injured on Monday last by being kicked by his horse.

Andrew Farley, fireman at No. 8, spent Wednesday last at Jermyn.

One of the Hungarians employed on the track, in Henry Lippert's gang, took a flying leap off from a trip of coal cars on No. 1 plane last Monday. He stopped rolling the same day.

George Race, of the light track, met with quite a severe accident on Friday last while trying to catch a fly ball. The ball was thrown from a sling shot high into the air and the sun being in his eyes he could not see distinctly, and the ball slipped through his hands striking him on the cheek bone knocking him down. His face was very badly swollen and he was confined to his home on Saturday. We write this account so that people will not think that Cap. has had an encounter with John L. Sullivan.

WIDEAWAKE.

"The Western Union linemen are repairing the wire over the mountain. The poles have been changed on No. 7 level so that the wire now runs along the parallel railroad. . ."

"The four Hungarians employed as track hands for Henry Lippert keep house in a small shanty on the high works near the car shop."

"One of the Hungarians employed on the track, in Henry Lippert's gang, took a flying leap off from a trip of coal cars on No. 1 plane last Monday. He stopped rolling the same day."

"Harry Dimock, who has been night watchman at No. 1 engine on the gravity road for over fifteen years, leaves his position after to-night to accept a position as night watchman for E. E. Hendrick at his oil works in this city."

The Mulligan guards at No. 3: What was this group?

GRAVITY NOTES.

Now the leaves begin to fade.

William Hunter, formerly with Ed. Inch, is the new section foreman on the light track.

Mrs. David Wolcott, of Carbondale, spent Sunday last with her parents, Mr. and Mrs. Adam Hunter, at No. 5.

George Shreehan, of No. 8 foot, was one of the delegates from Canaan township to the democratic convention held at Honesdale, on Monday. He went to do his duty to the men that elected him, and, notwithstanding the opposition he had to encounter, he did his whole duty nobly.

Levi Bennett, pulley tinker on the mountain line, was sick for two days this week.

John Fitzsimmons, of No. 7, resumed work again on Tuesday after being laid up over a week with his injuries.

Isaac Wedeman, formerly with E. E. Hendrick, is the new fireman at No. 2.

Mrs. Henry Vail, who has been visiting friends in New York city, Brooklyn and Boston for the past few weeks, returned home on Thursday last.

A drummer attended a festival held in the city hall last week and during the evening some one struck up a lively tune on the organ and he asked one of our gravity young ladies to dance the Racquet with him. She said certainly, and they started to go to the reception room. When they reached the door the young lady very quietly turned back closing the door in the dude's face. He roamed around the street for some time until one of his brother drummers went out and persuaded him to come back into the hall.

Little Edna, daughter of Mr. and Mrs. George Simrell, who had one of her eyes taken out on account of a cancer is again suffering with the same trouble with little or no hopes of finding any thing to help her. Mr. and Mrs. Simrell will have the aid and sympathy of a large circle of friends in their hours of severe trial and sorrow.

Mark Inch, who has been in the valley of the shadow for the past week, is said to be a little better but he is still very low.

Ennmett Swingle, of South Canaan, has joined the Mulligan guards at No. 3.

We were asked the following question the other night: "What is the shape of the pony wheel on Jack Foster's pulley car? We have been studying on it ever since and are finally obliged to give it up.

George Foster, engineer at No. 8, has purchased a lathe with which he expects to do some fine work.

Mr. Rufus Gaylord is putting a fine porch on the residence of Justus Cary, at No. 9. WIDEAWAKE.

Levi Bennett is the pulley tinker on the mountain line.

The new fireman at No. 2 is Isaac Wedeman. He worked formerly for E. E. Hendrick.

GRAVITY NOTES.

This weather is decidedly fallish.

John Haley, formerly at No. 4, has accepted a position under W. P. E. Morss, at Racket Brook Breaker.

Wint. Cary and S. A. Dilts and son Harry fished in the black waters of Hoadley's pond last Friday night and Saturday morning, returning home on the afternoon passenger with a fine mess of fish.

John Frutzman, formerly with Ed. Inch, has accepted the position at No. 2 foot made vacant by the resignation of Geo. Dimock, sr.

Conductor Skeels and gentleman friend passed over the gravity to Honesdale last Monday morning. William Rosser conducted the valley train on that day.

Morris Lavey, of Henry Lippert's gang, has accepted a position at No. 3.

Charley Ketchum has given up farming for the present, and has gone to work for the D. & H.

Richard Wonnacott, foreman at No. 8, was one of the delegates from Waymart to the republican convention held at Honesdale last Tuesday.

Justus Cary paid a visit to the farm of Sylvester Delaney in South Canaan, this week and brought home some of the silver ore that is said to contain four ounces of silver to each ton of ore. It is expected that a man from Colorado will put up a mill there this fall and commence mining for silver. The result will be watched with a good deal of interest by men owning property in Canaan township.

Mr. Warren Tappen met with a painful accident at Racket Brook Breaker last Tuesday. A timber, a foot square and twelve feet long fell a distance of eight feet striking Mr. Tappen on the foot smashing it badly. He was taken to his home in Carbondale, where he will be laid up for some time.

Abel Gray, one of Wayne county's prominent men, is doing some good work on the wagon road over the mountain.

Paymaster Atherton paid the shop hands on Monday and the gravity men between Carbondale and Honesdale on Wednesday. There was more money paid out on the gravity this month than for several months previous.

Miss Ella C. Aldrich, of New York city, is the guest of Miss Isabella Vail, at No. 7.

Miss Mamie Hosie, of Jermyn, is visiting her sister, Mrs Andrew Farley, at No. 9.

R. E. Weed says if the person who stole those pies from his house at No. 9, last Tuesday night, will return the plates he will make them a present of the pies.

Mr. Henry Sampson, of No. 8, has been on the sick list for the past few days.

There will be one early garden on the mountain next spring. If you don't believe it ask George Shreehan or Ted Shaffer in the foot of 8. **WIDEAWAKE.**

W. P. E. Morss is in charge at the Racket Brook Breaker.

Pay day

"Richard Wonnacott, foreman at No. 8, was one of the delegates from Waymart to the republican convention held at Honesdale last Tuesday."

Pies stolen at No. 9

At the Racket Brook Breaker, Warren Tappen was struck on the foot by a timber a foot square and twelve feet long, which fell eight feet before striking his foot.

"Will Foster who has been learning the blacksmith trade with William Crago, at Carbondale, is back on the gravity again. He is at present filling Mark Inch's place at No. 11."

GRAVITY NOTES.

Coal business is just booming on the gravity.

The Waymart M. E. and Presbyterian Sunday schools united in an excursion to Honesdale last Saturday.

Will Foster who has been learning the blacksmith trade with William Crago, at Carbondale, is back on the gravity again. He is at present filling Mark Inch's place at No. 11.

Mrs. Milton Shaffer is this week visiting friends at Pittston.

Mr. Henry Fitzsimmons and family, of Cleveland, Ohio, are the guests of their parents, Mr. and Mrs. Hugh Fitzsimmons, at No. 7.

Mr. Rufus Griswold wife and daughter, of Clinton, Wayne co., were the guests of Mr. and Mrs. Levi Bennett, at No. 4, on Saturday last.

Here is a fact but a large one! A cow owned on the mountain has been in the habit of jumping over any kind of a fence, and the owner thought he would put a stop to her jumping. So he fastened a log boat, weighing over 75 pounds, to her neck and thought she would stay where he put her. But imagine his surprise when he found that his high jumper had first swung the log boat over the fence and then jumped over after it and went into a neighbor's field to eat clover. He don't vas own dot gow any more already.

P. J. Foster and Samuel Thorp took in the county fair at Scranton, on Wednesday.

Emmit Swingle, of No. 4, has moved into the Loftus house at No. 4.

Mark Inch is improving and if nothing sets in he will recover.

F. J. Fitzsimmons, of the *Sunday News*, spent a part of this week visiting his parents at No. 7.

Mrs. Charles Avery has been seriously ill this week.

J. C. Davies and daughter Emma started yesterday for a week's visit with friends in New York city.

George Simrell has been in New York for the past week where his daughter is being treated for cancer, and from a card received from him on Tuesday we learn that the physicians entertain hopes of saving her life.

George Shreehan, of the foot of No. 8, had a severe attack of cholera morbus on Friday last.

Allie Stanton and Charley Ketchum have gone to work at the breaker.

We would like to see the man or beast that can get over or through the fence on No. 1 plane and not get caught in the attempt.

There is one of the heads on the gravity that has been named Lightning Activity.

A flock of crows sat on a tree in Durfee's meadow the other day looking toward a shadow crossing the field near by when one of the crows began singing "Wait 'till the flesh grows over the bones, Annie dear."

It is pretty hard for one man no matter how high he stands in the world to convince two other men that they are wrong when experience has taught them that they are right. It has been tried on the gravity this week.

"Why is Scotchie McMillen like Wide-awake of the *Leader*?" "Because he thinks he is of more importance in the world than he really is," (Silas Wegg in the *Sunday News*). Now we never thought we were of much importance in this world and since we have read Mr. Wegg's wonderful productions we are completely paralyzed. Our pen almost refuses to make a mark when we think there is such a wonderful brain in this age of the world's history. Daniel Webster was nowhere compared with Mr. Wegg. Why his account of the meetings of the "Happy Harlequins," at Waymart, each week is a whole cyclopedia of useless knowledge, and it will be handed down to the coming generations as the greatest work of the nineteenth century. The *News* would indeed be a blank without Silas Wegg's productions. It is really too bad that Jame Gordon Bennett had not run across him when he began publishing the *New York Herald*. Had he secured him as a reporter from Waymart all other periodicals would have had to take a back seat. We are not mad but we are dumbfounded when we think we are in the same country with the world's greatest scribe, Silas Wegg.

WIDEAWAKE.

"We would like to see the man or beast that can get over or through the fence on No. 1 plane and not get caught in the attempt."

Rival journalists go at each other!

"Here is a fact but a large one! A cow owned on the mountain has been in the habit of jumping over any kind of fence, and the owner thought he would put a stop to her jumping. So he fastened a log boat, weighing over 75 pounds, to her neck and thought she would stay where he put her. But imagine his surprise when he found that his high jumper had first swung the log boat over the fence and then jumped over after it and went into a neighbor's field to eat clover. He don't vas own dot gow any more already."

"George Shreehan, of the foot of No. 8, had a severe attack of cholera morbus on Friday last."

"The prospect for full time for the remainder of this year is good."

GRAVITY NOTES.

→ The prospect for full time for the remainder of this year is good.

Mr. James Keegan, a conductor on the D. L. & W., made his parents, Mr. and Mrs. John Keegan, a visit on Friday last.

W. F. Taylor is having his house at No. 9 plastered. He will have a comfortable home when it is finished.

Mrs. George H. Foster has had a severe attack of rheumatism this week.

Mrs. Charles Williamson, of Pittston, has been visiting Mrs. Milton Shaffer, at No. 9, this week.

Mrs. Joseph Wilcox has been improving in health very fast since they removed her from Carbondale to the Marshall cottage, at No. 4.

Miss. Emma L. Baker, of Hyde Park, has been visiting at Mrs. C. L. Stanton's this week.

J. E. Ketchum says he don't think the Carbondale dudes met at the ice house last Monday night for he thinks their singing would have killed the fish in No. 4 Pond.

Charley Monk wants a branch put in at Shepard's Crook so that first class coal trains can pass him there.

A large "what is it" has been around No. 4 pond this week. Some call it an eagle, and others a fish hawk, one thing sure it is not the *Scranton Eagle*.

The D. & H. should use some means to have a certain nuisance on No. 1 plane abated, for the continued health of the men employed on the head of No. 1 demands it.

← Mr. James Copeland has accepted a position as foreman of a gang who will make some needed repairs on the Bulk heads of No. 4 and 7 ponds.

← A broken eccentric strap at No. 6 delayed the coal and passengers over an hour on Tuesday afternoon, last.

Mr. Warren Tappan, who was injured at Racket Brook some time ago, is able to walk with the aid of a cane.

← A picnic under the management of Miss Minnie Marshall, of Carbondale, was held at Shepard's crook last Saturday, the rosy cheeks and smiling faces of the children on their return home gave evidence of a pleasant time.

Mr. Lawrence Rourke, of No. 12, and Miss Katie McLaughlin, of Pittston, were married at the latter place yesterday. Larry allow me to congratulate you and may the sunshine of prosperity ever shine upon your pathway.

A son of Mathew Manion, of No. 1 hill, was quite seriously injured at Racket Brook Breaker last Wednesday by having his foot run over by a light car.

There was a religious service held at No. 9 school-house last Sunday evening, led by Wilbur Buckingham which was well attended. There will be a meeting there again next Sunday evening, all are invited to attend. WIDEAWAKE.

Religious service held at No. 9 school-house last Sunday evening, led by Wilbur Buckingham

← A large un-identified bird seen at No. 4 pond.

← The bulk heads of No. 4 and No. 7 Ponds will be repaired, under the direction of James Copeland. .

← "A broken eccentric strap at No. 6 delayed the coal and passengers over an hour on Tuesday afternoon last."

← Picnic at Shepherd's Crook last Saturday under the management of Minnie Marshall

GRAVITY NOTES

Wild game is very scarce on the mountain this fall.

J. C. Davies returned from New York last Saturday.

Cyrus Hobbs is the conductor on train 2 from Honesdale. Wm. Pierce runs the head brake on Penwarden's train.

Mrs. Dimock, of Hawley, spent Sunday last with her daughter, Mrs. Charles Colbath, at No. 6.

Charley Campanan, employed with Henry Lippert, had his foot badly smashed on Monday last by having a large log fall on it.

Wm. Mills, of Waymart, has raised 400 bushels of potatoes on his farm in Clinton, this year. The farm was formerly owned by P. J. Foster, of No. 3.

Next Sunday being the regular Sunday for preaching at No. 4 chapel, it is expected that some one from Carbondale will be there to preach at 2:30 p. m.

Mr. Wallace Case has been doing some fine carpenter work at No. 7 this week where the feed pipe is to be changed so as to take the steam from the rear of the boilers instead of the center as formerly.

The new chimes at 28 don't ring out worth a cent.

Quite a large number from the gravity went to Binghamton on the excursion last Tuesday.

Mr. Editor, allow me to congratulate you upon your release from single wretchedness, and may all your future life be one of married blessedness.

Lawrence Farrell, who has run cars on the gravity for several years, has resigned and is braking on the Erie for Conductor Loftus.

David Jenkins, of the Powderly shaft train, has been pulling the reins over one of the D. & H. teams at No. 5 this week.

Warren Tappan resumed work last Monday.

Little Edna Simrell has been improving quite fast since they returned from New York, and her parents feel very much encouraged.

Patrick Powderly, formerly on the highworks at Carbondale, has accepted a position on a shaft train with Henry Herbert.

Mr. John Bate, fireman at No. 6, was on Thursday presented with a bouncing boy.

Mr. A. Patterson, one of the thriving young merchants of Waymart, presented C. L. Stanton with a beautiful lamp, this week, to be used at No. 4 chapel, for which he will receive the thanks of the members of that society.

The first passenger train from Honesdale arrives at No. 5 at 7.45 a. m., train 2 at 9.55 a. m., and the afternoon train at 4 o'clock.

12,580 cars of coal passed over the gravity to Honesdale last week.

The township road is being changed at No. 5, this week, so that it will cross below the highworks instead of under it as heretofore.

There will be preaching at No. 9 school house next Sunday evening by Wilbur Buckingham. Come out and hear him.

Mr. George Amey, who worked for the D. & H. twenty-five years ago, but now a successful farmer in southern Kansas, is visiting his parents, Mr. and Mrs. Abner Amey, at the foot of 11. It is the first time he has been in this section in over 24 years.

Mrs. John Keegan, of No. 9, has been indisposed for the past week.

Wat. says he don't see what they want that old house for anyway. It only spoils the looks of the new one.

Don't get discouraged 'Gene they will show themselves on the other side after a while.

Buttermilk is just as good as cream to make them gric for.

The people residing near No. 16, on the ten mile level were thrown into a state of intense excitement last Tuesday by the rumor that Mrs. Ellen Mealons had committed suicide by hanging. An investigation proved it to be true. No cause for the rash act is known. She leaves a husband and three children.

Mr. Henry Inch was married last Wednesday to Miss Aurilla Day, of So. Canaan.

Ed. Hubbard has been taking care of his brother Charlie, who was severely injured at Archbald last Saturday night.

WIDEAWAKE.

"12,580 cars of coal passed over the gravity to Honesdale last week."

The township road is being changed at No. 5 this week, so that it will cross below the highworks instead of under it as heretofore.

Near No. 16 on the Ten-mile Level: Mrs. Ellen Mealons has committed suicide by hanging.

Cyrus Hobbs is the conductor on Train 2 from Honesdale.

The whistle at Plane No. 28 served as a city fire whistle for many years. "The new chimes at 28 don't ring out worth a cent."

GRAVITY NOTES.

An excursion over the gravity one week from to-day.

Mr. and Mrs. John Decker, of Port Jervis, are visiting the latter's father, Mr. Alexander Ball, sr., at No. 9.

Rev. L. C. Floyd preached at No. 4 chapel last Sunday. The attendance was very small.

Lawrence Farrell is back on the gravity.

Justus Cary is having his house plastered, Mr. Wilbur Buckingham is doing the work.

Will Hubbard, of the locomotive shop, and Will Histed, conductor on the valley road, came up the mountain last Monday morning and spent the day in looking after something to shoot.

Chirp Robbins, from the branch, made his friends on the gravity a visit last Saturday.

Isaac Wedeman, No. 2 fireman, removed from Carbondale to the fireman's house opposite No. 3, on the Honesdale road last Monday.

Mr. James Copeland is well pleased with his new gang.

Henry Inch has accepted a position on the gravity.

Will Hubbard, of the locomotive shop, and Will Histed, conductor on the valley road, went hunting on the mountain last Monday.

"Charlie Ellis, engineer at No. 18, was elected a delegate from the Waymart Lodge of K. of H., to attend a session of the grand lodge of the Order held at Harrisburg last Wednesday. He started last Tuesday afternoon from Waymart and in the hurry and excitement previous to such a journey he forgot the most important papers, without which he could not be admitted to the grand lodge. He discovered his mistake on the way from Waymart to No. 2, where he got off the train and returned to his home. It being too late for him to reach Harrisburg in time he was very much disappointed."

Mrs. Richard Udy returned home from West Nicholson this week leaving her son-in-law, Minor Stark, the father of a bouncing boy.

Rev. Mr. Colg, of the Waymart, M. E. church started to go to No. 16 to preach last Sunday and took a pully car to ride on, but the car would not run so he had to walk and push the car in the bargain.

Hiram Inch and men have been assisting Wm. Hunter on repairs this week.

The new passenger train is well patronised.

Since the foot shanty at No. 2 burned we take back what we said in regard to the chimies at 28.

Charlie Monk met with a narrow escape from serious injury one day this week. He was at the top of a large apple tree picking apples when his foot slipped and he fell through the lower limbs to a ladder, which broke and fell to the ground. He came out with only a slight scare. As he got upon his feet he exclaimed, "Truth crushed to earth shall rise again."

Charlie Ellis, engineer at No. 18, was elected a delegate from the Waymart Lodge of K. of H., to attend a session of the grand lodge of the Order held at Harrisburg last Wednesday. He started last Tuesday afternoon from Waymart and in the hurry and excitement previous to such a journey he forgot the most important papers, without which he could not be admitted to the grand lodge. He discovered his mistake on the way from Waymart to No. 2, where he got off the train and returned to his home. It being too late for him to reach Harrisburg in time he was very much disappointed.

Richard Wonnecott, of No. 8, has had a painful attack of neuralgia this week.

WIDEAWAKE.

"The new passenger train is well patronized."

"Truth crushed to earth shall rise again."

GRAVITY NOTES.

Johnny, son of Mr. and Mrs. Arthur Burdick, died very suddenly last Sunday night. Aged about 9 years.

Little Edna Simrell is again suffering with cancer and the ray of hope that has filled the hearts of her parents for the past three weeks is swept away for they now feel that no earthly skill can relieve their little one.

A son of Harvey Tutthill, the shoemaker, had his arm badly jammed last Saturday by getting it caught between the bumpers on No. 3 level.

"The ditches on the light track are receiving a general cleaning out."

→ The ditches on the light track are receiving a general cleaning out.

Excursion to-day--if it don't rain.

Fred. Shaffer sports a new watch, a present from his father.

Dunwood Travis has accepted a position on the valley road.

Mark Inch is now able to walk out doors after being confined to his home for seventy days with typhoid fever.

Tommy Lavey says he never worked in as pleasant a place as No. 5, dumping gravel. It was not the work that made it so pleasant either.

Mr. Frank Russler, of Carbondale, and Miss Mary Flood, of No. 4, were married last Wednesday.

Henry Peters, who has been a faithful headman at No. 2 for some time, has accepted a position on conductor Geary's train on the lower end.

The engineer's house at No. 7, is soon to receive a general repairing.

"The engineer's house at No. 7, is soon to receive a general repairing."

"The highworks at No. 5 is a thing of the past."

→ The highworks at No. 5 is a thing of the past.

There is not as much coal being shipped over the gravity this month as there was in September.

How are you brother's dudes and harlequins? Hang your hats right on here gentlemen.

WIDEAWAKE.

GRAVITY NOTES.

Mrs. R. D. Rolis, at the foot of 11, is suffering with a severe attack of rheumatism.

C. L. Stanton spent Tuesday night last with his mother Mrs. C. G. Baker, at Hyde Park.

John Foster and wife spent Sunday last with friends in Scranton.

"Mountaineer", of the *Sunday News*, says "Wideawake", of the *LEADER*, is the only man on the gravity who belongs to the Carbondale dudes. Now are you not just a little off. If I remember rightly, Cap. Rice, Ed. Hub, and Rosser are all members in good standing.

Jud. Foster has got enough of the Branch and has returned to the gravity.

Racket Brook breaker has been very much improved under the supervision of Mr. Warren Tappan.

P. J. Foster made a flying trip to Honesdale last Monday.

A. D. Rolis is the best shoemaker on the gravity.

Mark Inch and wife are spending a few weeks with the latter's parents in South Canaan.

Boney Thorp having finished farming for this season has accepted a position on the gravity.

Mr. and Mrs. J. E. Ketchum have three children quite sick this week.

Barney Rourke is very busy these days catching frogs for the Harlequins frog bake which takes place at Waymart next month. We are not invited.

F. H. Weed and Perry Parsons have papered one end of their engine room with thick paper.

W. J. Taylor presented the light track boys with a clock last Tuesday.

Jim Miner says the fire at Carbondale last Sunday evening made it light enough at No. 2 so that a person could see to pick up a pin.

This one-horse railroad (as some of the steam-road boys call it) seems to offer great attractions to them, judging from the number of applications for work on it from these same boys.

Henry Inch has been resting himself at the foot of No. 2 this week. George Williams has been at the head

Charlie, the large bay horse belonging to the company, and doing service at No. 1 foot, fell on Tuesday, and had one of his eyes gouged out by a piece of iron rail. Charlie is laid up for repairs.

Mr. Pierce Butler preached at No. 4 chapel last Sunday evening to an uncommonly large audience and all present seemed very much interested in listening to the truth so ably proclaimed. Mr. Butler will speak there again next Sunday evening at 7 p. m. when it is hoped the chapel will be filled to overflowing with all who love to hear the word of God preached by a man whose whole heart and soul is in this grand work of leading men to the lamb of God that taketh away the sins of the world.

WIDEAWAKE.

"Racket Brook breaker has been very much improved under the supervision of Mr. Warren Tappan."

"Barney Rourke is very busy these days catching frogs for the Harlequins frog bake which takes place at Waymart next month. We are not invited."

"This one-horse railroad [the Gravity] (as some of the steam-road boys call it) seems to offer great attractions to them, judging from the number of applications for work on it from these same boys."

"Charlie, the large bay horse belonging to the company, and doing service at No. 1 foot, fell on Tuesday, and had one of his eyes gouged out by a piece of iron rail. Charlie is laid up for repairs."

GRAVITY NOTES.

No. 4 chapel has a new chimney.

Mr. Wagner, of Mount Cobb, Pa. gravity, spent last Saturday and Sunday with his daughter, Mrs. Samuel Chubb, of No. 5.

Dick Darrick, of the lower end, was the guest of J. E. Ketchum last Saturday night.

Mrs. Charles Baker, of Hyde Park, has been visiting friends along the gravity for the past week.

Mrs. Charles Mock spent Sunday last with friends at Honesdale.

Train 2 has been abandoned. Cyrus Hobbs is back on Penwarden's train.

There seems to be no talk of a suspension this month.

Win. Foster, from engine No. 25, was the guest of his brother George, at No. 9, on Sunday last.

Mrs. Alex. Travis and children, of Carbondale, visited friends at No. 4 on Wednesday.

Charlie Avery has left the gravity.

George Perkins, of No. 10, and John Gunsauls, of the summit, had a pulley car experience last Monday night, one car run into the other smashing both to flinders, but the men escaped with a few scratches and a bad fright. Boys don't run so fast.

J. C. Davies says if he had one penny for each trip he has pulled since he has been engineer at No. 4, on an average of 200 trips per day, he would have this (Friday) night the snug sum of \$13,390. How long has he been there?

Prof. Hockenberry, of Carbondale, will speak at No. 4 chapel next Sunday night. He is a very interesting speaker and those who have heard him are anxious to hear him again. Everybody is earnestly invited to attend this service.

Robert Clark was promoted yesterday from No. 3, foot to the head of No. 3. Robbie is a good boy and deserves this promotion.

The bet between No. 4 engineer and the mountain line rope rigger relative to the horizontal length of the North and South Poles still remains unsettled. This will be an important decision.

Snow covered the ground at No. 9 yesterday morning.

John Bate, No. 6 fireman, removed from the fireman's house to the engineer's house yesterday.

The little pond at the head of the water line at No. 8 has been cleaned out this week.

Jess. Cary thinks the free postal delivery system would be a great improvement to Waymart.

Question—If a man makes a friend a present of a violin worth three cents and after a while he changes his mind and makes a charge of \$3 for it, and don't get his pay, how much will he make in the transaction? We leave it with J. C. D. to decide.

Eddie, an employee at No. 2 stone quarry, met with a very severe accident last Saturday in the following manner: He was at the foot of the ledge doing some work when he was ordered to go up to the top of the ledge and, instead of going around as he was told to do, he attempted to climb up the side of the rocks. He had ascended about eight feet from the ground and to within twelve feet of the top when one of the men at work up there, not knowing he was coming that way, rolled a stone, weighing about forty pounds, over the edge of the rocks, striking Eddie upon the head, smashing through the skull. It was thought at first that he must be dead, but when the men got to him he was able to speak and stand alone, but he soon became unconscious and was taken to his home in Carbondale where he is still hovering between life and death. No blame can be attached to any person for this accident. Eddie is about 16 years old.

WIDEAWAKE.

"George Perkins, of No. 10, and John Gunsauls, of the summit, had a pulley car experience last Monday night, one car run into the other smashing both to flinders, but the men escaped with a few scratches and a bad fright. Boys don't run so fast."

"J. C. Davies says if he had one penny for each trip he has pulled since he has been engineer at No. 4, on an average of 200 trips per day, he would have this (Friday) night the snug sum of \$13,390. How long has he been there?"

Eddie, an employee at No. 2 stone quarry, did not follow instructions, which, unfortunately, may cost him his life.

GRAVITY NOTES.

Hurrah for H. M. Seely, president Judge of Wayne County; Whoop!

Andrew Farley has put a bay window on his barn to accomodate his bonikin.

John Gunsauls, of the Summit, has a notion to try the steam road. Success to you, Johnnie.

F. M. Osborn, Judge of election, of the North District of Carbondale township, was off on Tuesday and Wednesday attending to the duties of the office.

→ Charles Colbath and wife, occupy the fireman's house at No. 6.

Mrs. John Gunsauls, of Waymart, has been visiting friends at Ellinsville, N. Y., for the past three weeks.

John Bergan, of No. 4, was off three days this week attending the funeral of his cousin, a Mr. Stapleton, of Carbondale.

Little Edna Simrell is growing worse each day.

Mrs. R. D. Rolls is lying very low at her home, near the foot of 11, with inflammatory rheumatism.

Prof. Hockenberry will always be welcomed by a full house whenever he comes to No. 4 Chapel to speak again.

→ William Babcock, conductor of a Peckville train, was seriously injured last Monday, in the foot of E., by having a sling thrown from a platform which struck him upon the head. He was insensible for some time, but his injuries are not of a dangerous character.

There will be services at No. 4 Chapel next Sunday evening, conducted by a young man from Carbondale.

J. C. Davies wears out a new hat every time there is a republican victory hurrahing for the lucky men.

Conductor Rosser's train met with an accident on No. 7 level last Saturday morning. The following are the facts connected with it: There were 35 cars of coal standing on the main road, and the passenger train should have taken the branch, brakeman Ed. Hubbard was standing at his post on the platform of the foward car, as he glanced at the switch he thought it was all right and did not see his mistake until the train was within about 30 feet of the coal train and then he applied the brake and slowed up the train about one-third, before it struck the coal train, but it struck with force enough to throw some of the passengers from their seats, two or three being slightly but none seriously injured. This is the first accident of that kind that these trains have ever had, and when we consider the length of time they have run and the thousands of passengers they have carried safely over this road, we can but praise the men who have had them in charge. Accidents have happened on all roads, but there is no one feels worse over this one than Hub. He has always been a faithful brakeman, watching over the safety of his passengers, and the people traveling on the train have felt safe under his watchfulness. The men along the line have learned to regard him as an accommodating and obliging friend. We but echo the wish of every one that we shall see him reinstated as brakeman on this train in the near future.

WIDEAWAKE.

← Passenger train strikes coal train on No. 7 level last Saturday morning. No serious injuries.

Charles Colbath is now the fireman at No. 6.

William Babcock, conductor of a Peckville train, was seriously injured at the foot of E Plane last Monday.

GRAVITY NOTES.

Wm. Henry Vail was off on Friday and Saturday last on account of sickness.

George Tonkin has accepted a position on the branch.

Conductor Rosser has been spending the past week in the West. Conductor Penwarden has been running both trains.

Edward Albee, who was so seriously injured is said to be getting better.

Last Monday was a rough day for rail-roading, at least. It was rough enough on the mountain.

James Shannon better known as Dano and Isaac Tonkin, formerly with E. E. Hendrick, have accepted positions under Patrick Powderly at the Switchback.

Misses Jennie and Minnie Hapeman, of Pittston, have been the guests of Miss Carrie Shaffer, at No. 3, for the past week.

Peter States is kept busy these days hauling coal for the mountaineers.

Our thanks are due Jess Cary for favors received.

A Second Adventist has been holding forth at Waymart for the past week.

The engineer's house at No. 7 is very much improved under the skillful management of Wallace Case.

We have been requested to say that when the cabbage cutter is returned the pig's head will be paid for, and when the pig's head is paid for, the pay for the violin will be taken into consideration.

A man by the name of Spafford, a brakeman on Conductor Quinlin's train on the "ten mile," had his foot run over by a car last week and quite seriously injured.

John Gunsauls has been quite sick this week.

A young man from Carbondale visited friends on the hill last Sunday. At one house he said "By gracious there was a crowd of girls!"

The youngest son of Mr. and Mrs. John Bate, of No. 5, died last Saturday night, aged seven weeks. The funeral was held from the residence on Monday, Rev. L. C. Floyd officiating. The following little boys acted as pall bearers, Willie Carrell, Johnnie Phillips, Charlie Blott, and Charlie Ketchum. Interment at Carbondale.

WIDEAWAKE.

Two passenger trains from Carbondale to Honesdale: Rosser was the conductor on one, Penwarden on the other.

James "Dann" Shannon and Isaac Tonkin now work under Patrick Powderly at the Switchback.

A man named Spafford is the brakeman on Conductor Quinlin's train on the Ten-mile level.

Four little boys as the pall bearers at the funeral of the 7-week old son of Mr. and Mrs. John Bate, of No. 5.

GRAVITY NOTES.

This week has been Indian summer. We may now expect Pennsylvania winter.

There will be preaching at No. 4 chapel next Sunday, at 2:30 P. M., by one of the local preachers who are this week holding a convention in Carbondale.

Eugene Wonnacott, of Carbondale, passed over the gravity last Wednesday morning to attend the Shaffer-Case wedding at Waymart.

Chris. Shultz says Charlie Geary's life as a hunter would compare favorably with the life of Kit Carson.

Nick Flood, sr., of No. 4, caught a fine mess of pickerel through the ice on No. 4 pond last Monday.

Henry Lippert is a good stone mason as well as trackman.

John Gunsauls, of the summit, resumed work on Monday last.

A man by the name of Hugh Finnegan, a miner by occupation attempted to board Darick's train at No. 1 shaft last Saturday, and was thrown under the cars, having one leg so fearfully mangled that amputation was necessary.

Frank McMin, of No. 7, is one of Charlie Monk's boarders.

The new standard time is in use on the gravity.

Mrs. Robert Swan, of No. 9, has been seriously ill this week.

Mrs. R. D. Rolls is at this writing very much better.

Mrs. John Wilson, of Carbondale, was the guest of Mrs. Charles Colbath, at No. 6, on Tuesday last.

Mr. and Mrs. Nathan Wheeler, of Clinton, Wayne county, visited their granddaughter, Mrs. Samuel Chubb, at No. 5, last Tuesday.

A cottage prayer meeting was held at the residence of Mr. John Bate, at No. 6, last Wednesday evening.

Mose Cole has moved to No. 6 and will engage in the lumber business this winter.

The gravity passenger coach "Comet", which had been receiving repairs in the shop, was taken to the middle branch last Monday for a trial trip and in the foot of 28 it received a bump that sent it back to the shop again, but it went over the road to Honesdale on Wednesday. It is a perfect beauty.

A Post of the G. A. R. is to be organized at Waymart to-morrow night.

John Gaughan, of the ten mile level visited Scranton last Tuesday.

Mrs. George Chapman, of No. 6, has been visiting friends at Prompton the past week.

E. A. Dilts has been doing work for the D. & H., at No. 7, this week.

Any person in need of a stove pipe shelf would do well to call on F. M. Osborn.

Charles Gunsauls, the gravity mail carrier, will cut your hair and give you a clean shave for twenty-five cents.

John Berry, foreman of the lumber department, is suffering with several large carbuncles. He has had seventeen of the comforters this fall.

Charlie Miller, of No. 9, has joined in the march of Improvement and is having his house finished.

John Haley, of No. 3, had the index finger of his right hand taken off between the first and second joints on Monday last. He had it caught in a car wheel.

H. W. Powderly made a flying trip to Pittston last Saturday.

The weather permitting, there will be preaching at No. 4 chapel each evening next week by Rev. L. C. Floyd. The public are earnestly invited to attend these services.

Mr. Clarence Shaffer and Miss Lynn Case, daughter of Wallace Case, of Waymart, were married last Wednesday.

Mr. Richard Wonnacott, foreman at No. 8, and Miss Sarah Ball, of No. 9, were married last Wednesday.

Mr. Albert Keen, of No. 19, and Miss Carrie Miner, of Waymart, were married this week Wednesday.

And it wasn't a very good day for weddings either. WIDEAWAKE.

Hugh Finnegan serious hurt when he attempted to board Darick's train at No. 1 shaft last Saturday.

Charles Gunsauls, the gravity mail carrier, will cut your hair and give you a clean shave for twenty-five cents."

Three weddings:
Shaffer/Case,
Wonnacott/Ball,
and Keen/Miner

GRAVITY NOTES.

Did you not witness the glorious sunset last Tuesday evening.

Emmet Swingle, of No. 4, called on friends at South Canaan last Tuesday.

The feed pipe at No. 7 was changed Wednesday night.

We are informed that Ed. Hubbard will resume his position on the gravity passenger train to-morrow morning.

Cyrus Hobbs, Link Medland, Harry Tuthill and Will Price, of the gravity, went to New York last Saturday and were present at the great celebration on Monday.

Frank Penwarden ran head brake on the Honesdale passenger train during the absence of Cyrus Hobbs.

John Carrell entertained friends from the Pennsylvania gravity last Monday.

Mrs. Robert Swan has been improving in health this week.

Dr. Stephens, of Hawley, preached at No. 4 chapel last Sunday. He was attended by several of the local preachers and the meeting was said to have been very interesting.

Edward Albee was able to come up to No. 2 last Saturday.

Wm. Wagner, formerly, of No. 4, but now foreman of a gang of Italians on the new road, called on his friends in this locality this week.

Mrs. Merrick Berry, of Jermyn, visited friends at No. 9 last week, returning home on Monday last.

W. P. E. Morss is to have Italians for slate pickers at Racket Brook breaker.

John Healey expects to resume work next Monday.

G. W. Samson and men worked at No. 9 last Saturday night and a part of Sunday, and on their way down the grade with the supply car they found a plank on the rail which threw the car from the track and nearly down an embankment. It is fortunate that they came out uninjured.

The prospect for full time next month is not very bright.

For some reason there have been no meetings held at No. 4 chapel this week as announced in our last, but there will be preaching there next Sunday evening and on each evening during next week, except Saturday evening.

The D. & H. expect to load the last boat for this season at Honesdale to-day. About 100,000 tons of coal remain on the dumping ground.

J. E. Ketchum is now living on the fat of the land. He butchered this week.

Harry Vredenburg, conductor on the valley road passed over the gravity last Saturday on his way to New York to be gone one week.

Mrs. Ensign, widow of the late Orin Ensign, died at her home in Waymart last Tuesday evening, aged 54 years.

WIDEAWAKE.

Close call on Plane No. 9

"The D. & H. expect to load the last boat for this season at Honesdale to-day. About 100,000 tons of coal remain on the dumping ground."

"Wm. Wagner, formerly, of No. 4, but now foreman of a gang of Italians on the new road, called on his friends in this locality this week."

W. P. E. Morss is to have Italians for slate pickers at the Racket Brook breaker."

Ed Hubbard will resume his position on the Gravity passenger train: see November 9 *Gravity Notes*, above.

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